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Final Environmental Impact Report/  
Final Environmental Impact Statement

Volume II: Responses to Comments

June 1996

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BART-SAN FRANCISCO  
AIRPORT EXTENSION

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**FINAL  
ENVIRONMENTAL IMPACT STATEMENT**

**FINAL  
ENVIRONMENTAL IMPACT REPORT**

**VOLUME II: RESPONSES TO COMMENTS ON THE DEIR/SDEIS**

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**BART-SAN FRANCISCO INTERNATIONAL AIRPORT EXTENSION**

**NORTHERN SAN MATEO COUNTY  
CALIFORNIA**

---

**U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL TRANSIT ADMINISTRATION (FTA)**

**SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT (BART)  
SAN MATEO COUNTY TRANSIT DISTRICT (SAMTRANS)**

---

**WITH COOPERATING AGENCIES:**

**U.S. ARMY CORPS OF ENGINEERS  
FEDERAL HIGHWAY ADMINISTRATION  
FEDERAL AVIATION ADMINISTRATION**

JUNE 1996

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BART-San Francisco  
International Airport  
1996.

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# Chapter 1 Introduction

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## 1.1 PURPOSE OF THIS VOLUME

---

This Volume II of the BART-San Francisco Airport Extension Final Environmental Impact Report/Final Environmental Impact Statement (FEIR/FEIS) responds to comments received on the draft environmental documents concerning the proposed BART extension. The draft documents are collectively referred to as the January 1995 BART-San Francisco Airport Extension Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (DEIR/SDEIS) and encompass an Executive Summary, the DEIR/Technical Appendix, the Summary of the DEIR/SDEIS, and a Design Appendix containing the conceptual plans and profiles for each of the project alternatives. Comments have been submitted either as letters or as oral testimony during public hearings held during a 60-day public comment and review period that extended from January 13, 1995 through March 12, 1995.

The BART and SamTrans boards must consider these responses and make specific findings that the FEIR complies with the California Environmental Quality Act. Similarly, the Federal Transit Administration (FTA) must approve the FEIS. These steps must occur before a project can be adopted.

---

## 1.2 ORGANIZATION OF THIS VOLUME

---

This document includes written and oral comments made during the public review on the January 1995 DEIR/SDEIS, and responses to those comments. Chapter 2 of this volume provides a list of all commentors on both the January and September 1995 draft documents, organized in the following sequence: federal agencies, state agencies, local agencies, organizations, businesses and individuals, and individuals who commented at public hearings for the project. Within each of these categories, individual commentors are alphabetized.

In many FEIR/FEISs, photocopies of comment letters are reproduced, with each discrete comment bracketed and numbered, and the response to that comment correspondingly numbered and provided immediately following a copy of the comment letter. Because of the volume of the letters received on the proposed BART-San Francisco Airport Extension, discrete comments were identified and abstracted verbatim from the letters. Abstracts from the comment letters are presented in Chapter 3 in the same sequence as the list of commentors in Chapter 2. A response to each comment directly follows that comment.

In order to find responses to a particular comment letter or speaker, please refer to the list in Chapter 2 for the commentor's name, business, or organization. Each commentor has been assigned a discrete identification number and responses are provided in Chapter 3 by this commentor identification number. Thus, Response 4.12 in Chapter 3 refers to Commentor 4 and the response to Comment 12 in his/her letter.

Responses generally provide clarification, explanation, or elaboration. In some cases, they also modify or correct text of the DEIR/Technical Appendix or the Summary of the DEIR/SDEIS. For easy reference, all such revisions are indented within a response in Chapter 3, and are also summarized in Chapter 4 of

this volume. Thus, for example, if a reviewer wanted to see if the text of the draft documents had been changed, he/she would refer to Chapter 4 of this volume and see if the page he/she were interested in was listed. If not, then changes to that page have not been made in response to comments. If, however, the page were listed, Chapter 4 would identify the Response Number triggering the text change and present the text modification.

---

### 1.3 ENVIRONMENTAL REVIEW PROCESS AND SELECTION OF AN LPA

---

#### DEIR/SDEIS

The DEIR/SDEIS of January 1995 evaluated potential impacts and proposed mitigation measures for the following seven alternatives: the Proposed Project, which was selected at the conclusion of the 1992 Alternatives Analysis study as the Locally Preferred Alternative (1992 LPA); a "No Build" Alternative, which assessed the impacts of not undertaking any project (Alternative I); a Transportation Systems Management Alternative, which analyzed the effects of future transportation improvements other than the BART extension (Alternative II); and four BART build alternatives (Alternatives III, IV, V, and VI) with terminus stations in San Bruno, the SFIA, or Millbrae. Three design options representing variations on the BART build alternatives were also studied.

The DEIR/SDEIS was circulated to approximately 440 agencies, organizations, and individuals and was made available at all libraries and city halls within the project corridor. One hundred and fifty persons testified at public hearings, held February 15, February 18, and March 4, 1995 to solicit comments on the DEIR/SDEIS. By the conclusion of the public comment period on March 13, 1995, approximately 260 agencies, organizations, and individuals had submitted written comments on the DEIR/SDEIS. In total, approximately 3,000 discrete written and verbal comments were received. The substance of these comments is summarized in the *Summary Report of BART–San Francisco Airport Extension Agency, Organization, and Individual Comments*, found in Appendix E of the May 1995 *BART–San Francisco Airport Extension Locally Preferred Alternative Report*. This document is available for public review at the BART offices located at 1000 Broadway, Oakland, California.

Based on public comment and considerations of transit ridership, service to the SFIA, and environmental impacts, the BART and SamTrans boards on April 27 and 28, 1995 selected Alternative VI–BART to Millbrae via the planned Airport International Terminal as the LPA. This decision defined Alternative VI as the local recommendation for more detailed engineering and final environmental documentation.

The selected route would follow the San Bruno branch of the Southern Pacific Transportation Company (SPTCo) railroad between Colma and San Bruno, and then merge with the CalTrain mainline through downtown San Bruno. South of Angus Avenue in San Bruno, the BART subway alignment would turn southeast under Highway 101 to the planned International Terminal at the SFIA, and then turn southwest back under Highway 101 to the CalTrain mainline. The proposed extension would terminate at a station at Millbrae Avenue in Millbrae, with a tailtrack extending 1,500 feet into Burlingame. Stations would be provided at Hickey Boulevard, Tanforan Park Shopping Center, the SFIA at the planned International Terminal, and at a BART/CalTrain intermodal station on Millbrae Avenue. The Alternative VI LPA calls for a subway configuration between Colma and South Spruce Avenue in South San Francisco; a retained cut alignment from South Spruce Avenue to Euclid Avenue in San Bruno; a subway alignment through downtown San Bruno, turning southeast in tunnel to the planned Airport International Terminal, and

returning to the CalTrain mainline at Hillcrest Avenue in Millbrae; and an at-grade Millbrae Avenue Station with tailtracks extending south to Trousdale Avenue in Burlingame.

## **FRDEIR/S#2DEIS**

---

Following the selection of the Alternative VI LPA, several events occurred that resulted in a reevaluation of the Alternative VI LPA. Specifically,

- MTC Resolution No. 2451, which supported BART's preliminary engineering grant application to the FTA, was partially conditioned on the understanding the BART would identify and implement feasible cost containment strategies;
- the U.S. Congress House Appropriations Committee directed that BART consider less expensive design options for extending BART service to the SFIA;
- the BART and SamTrans Boards of Directors directed consideration of an aerial configuration across the SFIA property west of Highway 101 and an aerial airport station at the SFIA's proposed International Terminal;
- the San Francisco Airports Commission voted to support an aerial configuration across the SFIA property west of Highway 101 and an aerial airport station at the SFIA's proposed International Terminal (although at a different location and elevation than desired by the BART and SamTrans boards); and
- BART and the San Francisco Airports Commission passed resolutions to adopt passenger service quality standards for a BART station at the SFIA.

Given these circumstances, a Focused Recirculated Draft Environmental Impact Report/Supplemental Draft #2 Environmental Impact Statement (FRDEIR/S#2DEIS) was prepared to evaluate an aerial, rather than tunnel, alignment into the San Francisco International Airport (SFIA); two aerial station options (Options B and X) at the SFIA, BART service directly to the Millbrae Avenue Station from the Tanforan Station along the CalTrain mainline, and a re-design of the Millbrae Avenue Station. Collectively, these changes comprise the Aerial Design Option to the Alternative VI LPA. The FRDEIR/S#2DEIS did not evaluate the segment of the Alternative VI LPA alignment between the Colma BART Station and Angus Avenue in San Bruno because no changes were proposed to this segment.

A 45-day public comment period concluding on November 20, 1995 and one public hearing held on November 16, 1995 in Millbrae provided opportunity for public comments on the FRDEIR/S#2DEIS. Seventy-two comment letters were received and 50 individuals spoke at the public hearing. The substance of the comments submitted on the FRDEIR/S#2DESIS is summarized in the *Summary Report of Agency, Organization, and Individual Comments*, found as Attachment C to the December 1995 *BART–San Francisco Airport Extension Locally Preferred Alternative Report*. This document is available for public review at the BART offices located at 1000 Broadway, Oakland, California.

## **Locally Preferred Alternative**

---

On November 28 1995, the BART Board adopted the Alternative VI Aerial Design Option as the new LPA. On November 29 1995, the SamTrans Board passed a similar resolution in support of the Aerial Design Option LPA. The new LPA is similar to the Alternative VI LPA with the following differences:

- revenue service track would be split into two portions, with one providing a direct connection from the Colma BART Station tailtracks to the Millbrae Avenue Station and an east-west aerial wye stub perpendicular to the CalTrain/BART mainline terminating at the SFIA;
- certain design refinements suggested by the cities along the project corridor would be incorporated, including:
  - improvements to Colma Creek in the vicinity of the Hickey Station in South San Francisco (instead of placing the creek in a box culvert);
  - lowering the BART subway profile under South Spruce Avenue in South San Francisco, allowing the street to maintain its existing grade (instead of changing the street profile to bridge over the BART alignment);
  - south of South Spruce Avenue, the alignment is in subway and shifts westward to accommodate proposed design refinements at the Tanforan Station (instead of a retained cut alignment along the SPTCo tracks); and
  - a subway Tanforan Station within the Tanforan Park Shopping Center, along with certain other suggestions made by the City of San Bruno (instead of a retained cut station adjacent to the SPTCo tracks and the Fifth Addition neighborhood);
- south of Angus Avenue in San Bruno, the horizontal and vertical alignment would be that proposed by the Aerial Design Option to Alternative VI and evaluated in the FRDEIR/S#2DEIS (see description above); and
- the Millbrae Avenue Station would be redesigned to incorporate certain suggestions by the City of Millbrae, including reorientation of the parking garage, addition of another access road to the garage, and changes to the internal circulation within the station.

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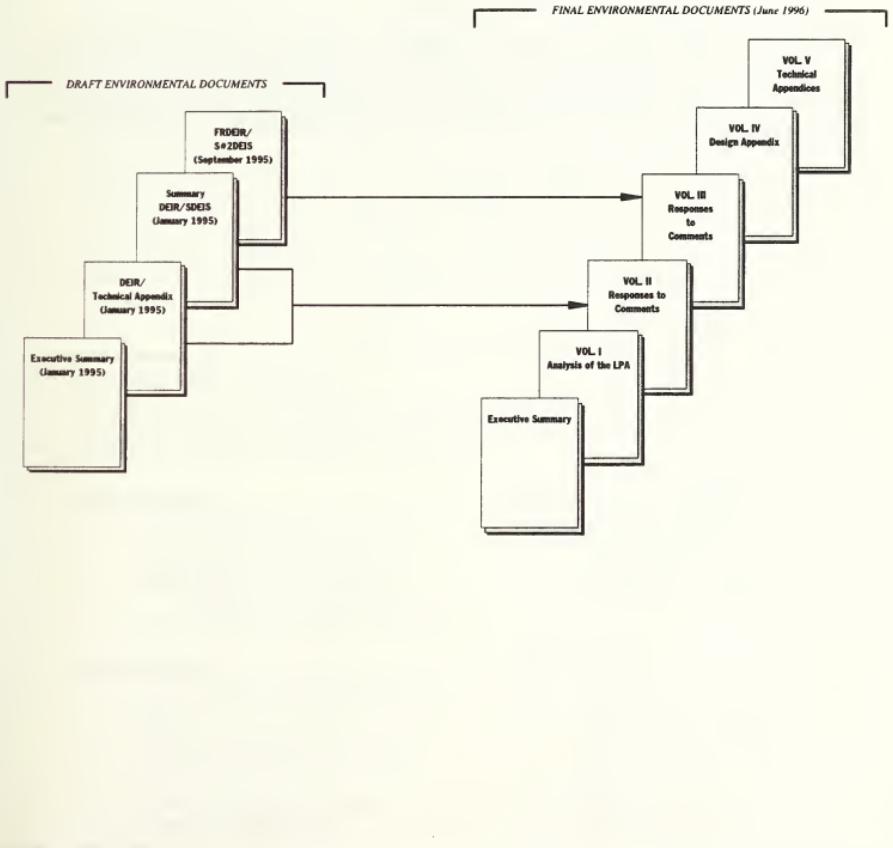
## **1.4 ORGANIZATION OF THE FEIR/FEIS**

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The FEIR/FEIS for the BART-San Francisco Airport Extension Project is composed of five volumes and an Executive Summary (Figure 1-1).

**Volume I** of this FEIR/FEIS revises the January 1995 DEIR/SDEIS and the September 1995 FRDEIR/S#2DEIS to focus the environmental analysis on the Aerial Design Option LPA. Volume I also incorporates clarifications and corrections resulting from public comments on both the January and September 1995 draft documents and on design refinements made since January 1995.

**Volume II** of this FEIR/FEIS includes written and oral comments made during the public review on the January 1995 DEIR/SDEIS, and responses to those comments. Chapter 2 of this volume provides a list of all commentors on both the January and September 1995 draft documents, organized in the following sequence: federal agencies, state agencies, local agencies, organizations, businesses and individuals, and



Organization of the BART-San Francisco Airport Extension Environmental Documents

FIGURE

1-1

individuals who commented at public hearings for the project. Within each of these categories, individual commentors are alphabetized.

**Volume III** contains comments and responses associated with the FRDEIR/S#2DEIS of September 1995. The organization of Volume III is identical to that of Volume II.

**Volume IV** provides the reader with the plans and profiles of the selected LPA (the Alternative VI Aerial Design Option), and **Volume V** contains supporting environmental documentation, such as the Endangered Species Act Section 7 Biological Opinion of the U.S. Fish and Wildlife Service for the endangered San Francisco garter snake, and the National Historic Preservation Act Section 106 documentation for effects to significant cultural resources.

Finally, the **Executive Summary** is a succinct document describing the Aerial Design Option LPA and the identified impacts and mitigation measures. It includes sections on the project's background, purpose, and need; project alternatives; significant adverse impacts of the Aerial Design Option LPA; and mitigation measures to avoid or reduce impacts. Impacts that cannot be reduced to an insignificant level are also identified.

# **Chapter 2**

## **List of Commentors**

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### **2.1 INTRODUCTION**

---

This chapter presents a list of all individuals who submitted comments on the January 1995 DEIR/SDEIS. A list of commentors on the September 1995 FRDEIR/S#2DEIS is also provided to give a complete listing of all individuals who submitted letters or provided oral testimony on the draft environmental documents. If a person finds his/her name or organization under the list of commentors for Volume II, then that individual provided remarks on the January 1995 DEIR/SDEIS and he/she will find responses in Chapter 3 of that volume. If a person finds his/her name or organization under the list of commentors for Volume III, then that individual provided remarks on the September 1995 FRDEIR/S#2DEIS and he/she will find responses in Chapter 3 of Volume III. Commentors who submitted letters have been organized alphabetically within the following groups: federal agencies, state agencies, local agencies, organizations, and individuals and businesses. Each commentor is assigned a discrete identification number. Thus, even though an individual may have submitted multiple letters, all letters by the same individual have the same commentor identification number. This enables each commentor to review responses to his/her comments all together, rather than dispersed throughout this chapter. Those individuals who provided oral testimony at one of the public hearings are organized alphabetically in a list, "Speakers," distinct and separate from the written comments. As with the comment letters, even though an individual may have spoken at more than one hearing, all oral comments by this individual have been aggregated under a single, discrete speaker identification number.

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### **2.2 VOLUME II COMMENTORS**

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The following individuals submitted comments on the January 1995 DEIR/SDEIS. Responses to their comments are contained in Chapter 3 of this document.

---

#### **Federal Agencies**

---

1. U.S. Department of the Interior
2. U.S. Department of Transportation, Federal Aviation Administration
3. U.S. Environmental Protection Agency

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#### **State Agencies**

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4. California State Department of Fish and Game
5. California State Department of Toxic Substances Control
6. California State Department of Transportation (Caltrans)

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#### **State Agencies (continued)**

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7. Governor's Office of Planning and Research
8. California State Public Utilities Commission

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#### **Local Agencies**

---

9. Alameda-Contra Costa Transit District
10. City/County Association of Governments of San Mateo County
11. Peninsula Corridor Joint Powers Board
12. City and County of San Francisco Planning Department
13. City of Brisbane

### **Local Agencies (continued)**

---

14. City of Burlingame
15. City of Daly City
16. City of Millbrae
17. City of San Bruno
18. City of San Bruno City Council
19. City of South San Francisco
20. City of South San Francisco Office of the Historic Preservation Commission
21. Millbrae School District
22. San Bruno Park School District
23. San Francisco County Transportation Authority
24. San Francisco International Airport
25. San Mateo County Department of Public Works
26. San Mateo County Transportation Authority
27. San Mateo Union High School District
28. South San Francisco Unified School District
29. Town of Colma

### **Organizations**

---

30. Air Transport Association
31. Associated General Contractors of America, California
32. Belle Air Elementary School PTA
33. Belle Air Neighbors
34. Boys & Girls Clubs, North San Mateo County
35. Building and Construction Trades Council of San Mateo County
36. Burlingame Beautification Commission
37. Burlingame Chamber of Commerce
38. Burlingame Homeowners Association
39. City Hall Watch
40. Coalition of Colma Cemeteries
41. County Council, Leagues of Women Voters of San Mateo County

### **Organizations (continued)**

---

42. Fifth Addition Neighborhood Association
43. Garden Valley Homeowners Association
44. Redwood City San Mateo County Chamber of Commerce
45. Regional Alliance For Transit
46. San Bruno Chamber of Commerce
47. San Bruno Citizen's Coalition
48. San Francisco Bay Trail
49. San Francisco Planning and Urban Research Association
50. San Francisco Tomorrow Transportation Committee
51. San Mateo County Central Labor Council
52. San Mateo County Economic Development Association
53. San Mateo County Restaurant & Hotel Association
54. Sierra Club
55. South San Francisco BART Citizens Advisory Committee
56. South San Francisco Chamber of Commerce
57. Train Rider's Association of California

### **Individuals and Businesses**

---

58. ABC Locksmith Company
59. Abco Printers
60. Acha, Ma. Isabel M.
61. Agid, Gwen
62. Airport Auto Parts, Inc.
63. Albert, Peter
64. Alentiev, Tim
65. Allen, Robert S.
66. Artichoke Joe's
67. Azzopardi, Philip C.
68. Bays, Walter
69. Belknap, Erlys

**Individuals and Businesses (continued)**

70. Belknap, Joni
71. Bike Route Inc.
72. Bisson-Barnes, Alice
73. Boyd, Donald W.
74. Bracker, Jessie
75. Brun, Gottfried
76. Brunzie, Suzanne
77. Bugler, Helen and Joan
78. Bullis, Greg H.
79. Burke, Patricia
80. Burris, Elaine R.
81. Burtzloff, Lorraine
82. Bywater, D.F.
83. Cadona, Anna
84. Cadona, Bruno
85. Cameron, Charlie
86. Camilleri, Mary
87. Campbell, Daniel
88. Cano, Anne
89. Cassanego, Gilda
90. Castro, Virgilio
91. Chambers, Tom
92. Chavéz, José
93. Chen, Tony
94. Chow, Arthur M.
95. Cid, Liza
96. Clark, Richard G.
97. Code Three Lock and Gun
98. Colarusso, Al.
99. Colma Residents (11 People)
100. Concerned Neighbors in Winston Manor
101. Cook, Theresa
102. Cypress Lawn Cemetery
103. De Anda, Katharine
104. Del Rosario, Ernesto
105. Dental Associates

**Individuals and Businesses (continued)**

106. Downing, Lorraine C.
107. Dreiling, Martin L.
108. Dubois, Mike
109. Everett, Dorothy
110. Falsarella, John and Caimotto, Joseph W.
111. Fay, James S.
112. Fernando, David
113. Field, Linda L.
114. Fijana Salad Bar & Sandwich Shop
115. Fisher, Alice
116. Fogarty, Janet
117. Fogarty, Peter
118. Frank, L.
119. Fucigna, Jeffrey W.
120. Fuentes, Carol and John
121. Gaeboz, Robert and Ruth
122. Garrison, Peter C.
123. Gartner, Debbie
124. Garver, Connie J. and Huthison, Mark
125. Geasland, Claudia
126. Genardini, Pia
127. Gevertz, Barry
128. Giannini, Laura and Robert
129. Gigi, Laura
130. Gipe, William
131. Gladstone, Victor W.
132. Golden Gate Clock House
133. Goldman, Christine
134. Gomery, Jane
135. Gonzales, Patricia
136. Green, C.
137. Gregory, Sylvia M.
138. Gullmes, Sherley
139. Herlihy, James A.
140. Henry Horn & Sons Insurance
141. Hills, Ernest H.

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**Individuals and Businesses (continued)**

---

142. Hizazi, Helena W.
143. Holesapple, Georgette
144. Horn Family
145. Horn, Stan
146. Huening, Tom
147. Jarman, Jeanne
148. Jewel Cross, Nancy
149. Johnson, Neal
150. Joseph, Diane
151. Kaiser Permanente
152. Kaiser, Marina
153. Kaiser, Marina
154. Kehrlein, Charles
155. Kelly, James W.
156. Kochever, Roberta and William
157. Koll Real Estate Services Company
158. Kopatschek, Haydee
159. Koss, Diane M.
160. Krejewske, Grazyne
161. Lavaki, Emeline A.
162. Lawler, Sheila B.
163. Lawlor, Owen
164. Lazareto, Mila
165. Lewis, Tracy
166. Lighthouse Hotel
167. Matulich, Tish
168. Mazza, Hilda
169. Mccraney, Jim
170. Meckler, Al
171. Mendelson, Glenn
172. Michel, Arthur H.
173. Midson, Ramona and Bracker, Jessie
174. Millbrae Residents (475 People)
175. Miller, Norma
176. Mirta, Hassan
177. Miyashiro, Lois K.

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**Individuals and Businesses (continued)**

---

178. Monaco, Daniel J.
179. Morse, Doris
180. Moyes, Jackie
181. Muzzi, Vincent A.
182. Neirby, Tamara
183. Nepote, Paul
184. Nielsen, Jean
185. Norton, Sonya
186. O'Mohony, Rosalie M.
187. Okken, Charles
188. Pacheco, Joe and Christine
189. Palmieri, Gail
190. Parker, Sherwood
191. Peninsula Temple Sholom
192. Pet World
193. Pincus, Melvin
194. Radebaugh, Gloria
195. Rasmussen, Henning C.
196. Rivasplata, Charles R.
197. Robbins, Dorothy
198. Romaine, Ann
199. Romaine, Ronald D.
200. Romino, Josephine
201. Ron Price Motors
202. Rosensweig, Teresa
203. Rosenthal, Leon E.
204. Russo, Susan and Ron
205. San Bruno Cleaners and Launderette
206. San Bruno Residents (6 People)
207. Saunders, Dolores
208. Schmidt, Alfred C.
209. Schonig, B.
210. Schulz, Timothy
211. Schwartz, Richard
212. Senkin, Jerome
213. Shankar, Vishnu

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**Individuals and Businesses (continued)**

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- 214. Silveira, W.M.
- 215. Sitike Counseling Center
- 216. Skinner, Joan
- 217. Slavick, Robert
- 218. Smith, Delancy
- 219. Smith, Susan M.
- 220. St. Bruno's Church
- 221. Stanford University Planning Office
- 222. Starkie Family
- 223. Stephens, Louise
- 224. Stockton, Robert C.
- 225. Studendorff, Frank and Nyla
- 226. Tillisch, Kathy & Michael
- 227. Town Cobbler Orthopedic Service
- 228. Treasure Island Motel & Trailer Court Corporation
- 229. Trevino, Sophia Lin
- 230. Ultimate Fly Shop
- 231. Oliveira, Mrs.
- 232. Unidentifiable
- 233. Unidentifiable
- 234. Veach, Marlene
- 235. Vincent, Doris O.
- 236. Voyager Travel
- 237. Waddell, Bob and Bernhardt, Kathy K.
- 238. Ward, Ethlyn
- 239. Ward, John P.
- 240. Welch, Joseph W. Jr. Real Estate
- 241. Wendel Rosen Black & Dean
- 242. Wheeler, Jim
- 243. White, George
- 244. Wolfe, Vaughn
- 245. Younge, Fitzroy
- 246. Yur Design, Inc.; Fraser, Sue and Hugh
- 247. Zalesky, Pauline
- 248. Zalesky, William
- 249. Zutraun, Hermann

---

**Speakers**

---

- S1. Alentiev, Tim (3/4/95)
- S2. Alesna, Lorraine (2/15/95)
- S3. Allen, Robert (2/15/95, 2/18/95, 3/4/95)
- S4. Amstrop, Irving (3/4/95)
- S5. Baker, Bill (2/15/95)
- S6. Bartalini, Jack (2/15/95, 2/18/95)
- S7. Becker, Todd (2/15/95)
- S8. Beckett, Jack (3/4/95)
- S9. Belknap, Erlys (3/4/95)
- S10. Bernard, Kathleen (2/15/95)
- S11. Bisson-Barnes, Alice (2/18/95)
- S12. Bracker, Jessie (2/18/95, 3/4/95)
- S13. Brun, Gottfried (2/18/95)
- S14. Bulsan, Consor (2/18/95)
- S15. Burke, Patricia (2/15/95, 2/18/95, 3/4/95)
- S16. Buschman, Scott (2/15/95, 3/4/95)
- S17. Caimotto, Joseph (3/4/95)
- S18. Cameron, Charlie (3/4/95)
- S19. Carter, Jeff (2/18/95, 3/4/95)
- S20. De Anda, Katharine (3/4/95)
- S21. Delander, Paul (2/15/95)
- S22. Dell'angela, Louis (2/15/95, 2/18/95)
- S23. Derenzi, Gary (2/15/95)
- S24. Deville, Denise (3/4/95)
- S25. Difilippo, Joe (2/15/95)
- S26. Drago, Jack (3/4/95)
- S27. Dreiling, Martin (2/15/95)
- S28. Edwards, Jeff, (3/4/95)
- S28.A Falsarella, John (3/4/95)
- S29. Fernkes, Joe (3/4/95)
- S30. Fogarty, Janet (3/4/95)
- S31. Fogarty, Peter (3/4/95)
- S32. Frank, L. (2/15/95)
- S33. Frate, Don (3/4/95)
- S34. Geasland, Richard (2/18/95)
- S35. Gil, Joan (2/18/95)

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**Speakers (continued)**

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- S36. Giusto, Albino (3/4/95)
- S37. Gonsolves, Maxine (3/4/95)
- S38. Govermale, Tony (3/4/95)
- S39. Gregory, Sylvia (3/4/95)
- S40. Gwathney, Margaret (2/15/95)
- S41. Haas, James (3/4/95)
- S42. Hills, Ernest (3/4/95)
- S43. Hills, Rick (3/4/95)
- S44. Holober, Richard (3/4/95)
- S45. Hooper, John (2/18/95)
- S46. Horn, Alan (2/15/95)
- S47. Huo, Shue (3/4/95)
- S48. Jewel Cross, Nancy (3/4/95)
- S49. Johnson, Neal (2/18/95)
- S50. Jordan, Gerhard (3/4/95)
- S51. Keisling, Michael, (2/15/95, 2/18/95)
- S52. Kelly, James W. Jr. (2/15/95, 3/4/95)
- S53. King, Dwight (3/4/95)
- S54. Knight, Marti (2/15/95)
- S55. Kopp, Quentin Senator (3/4/95)
- S56. Links, Bo (2/15/95)
- S57. Loftis, Marilyn (2/15/95)
- S58. Lyons, Larry (3/4/95)
- S59. Machida, Eileen (2/18/95)
- S60. Matalquin, Loardos (2/15/95)
- S61. McIntosh, Teresa (2/15/95)
- S62. McMahon, Joanne (3/4/95)
- S63. McNamara, Dan (2/15/95)
- S64. Mendelson, Glenn (2/15/95)
- S65. Midson, Ramona (2/15/95)
- S66. Mooney, John (2/15/95)
- S67. Morales, Alberto (3/4/95)
- S68. Morehouse, Lester (2/15/95)
- S69. Morse, Doris (Mayor) (3/4/95)
- S70. Nesbitt, Bryce (2/15/95)
- S71. O'Mohony, Rosalie M. (3/4/95)

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**Speakers (continued)**

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- S72. Pagliaro, Frank (2/18/95)
- S73. Palafox, Josefina (2/15/95)
- S74. Pallas, Chris (2/15/95)
- S75. Parker, Sherwood (2/15/95)
- S76. Peeples, Christian (2/15/95)
- S76.A Philip, Karen (3/4/95)
- S77. Pincus, Melvin (3/4/95)
- S78. Piuton, Kalini (2/15/95)
- S79. Richardson, Mina (2/15/95)
- S80. Rogers, Elizabeth (3/4/95)
- S81. Romaine, Ann (3/4/95)
- S82. Romaine, Ronald D. (3/4/95)
- S83. Sacco, Anthony (3/4/95)
- S84. Schwartz, Richard (2/18/95, 3/4/95)
- S85. Shoecraft, Don (3/4/95)
- S86. Simon, Ed (3/4/95)
- S87. Skinner, Joan (2/18/95)
- S88. Skinner, Walter (2/18/95)
- S89. Skjonsby, Dorothy (3/4/95)
- S90. Spencer, Vonnie (3/4/95)
- S91. Spinelli, Mike (3/4/95)
- S92. Stockton, Robert (2/15/95)
- S93. Stoll, Gerhard (3/4/95)
- S94. Sweeney, Mike (3/4/95)
- S95. Thomas, Owen (2/15/95)
- S96. Torczyer, Jerome (2/15/95)
- S97. Trapp, Onnolee (2/15/95)
- S98. Triano, George (3/4/95)
- S99. Urbach, Rose (2/18/95, 3/4/95)
- S100. Valente, Norma (3/4/95)
- S101. Van Pelt, Steve (2/18/95)
- S102. Ward, John (3/4/95)
- S103. Waxstein, Sam (2/15/95)
- S104. Wayne, Alan (2/15/95)
- S105. Wheeler, Jim (2/18/95)
- S106. Williams, Matt (2/15/95)

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**Speakers (continued)**

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S107. Wolfe, Vaughn (2/15/95, 2/18/95)

**Additional Commentors**

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A1. Caputo, Tito

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**Additional Commentors (continued)**

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A2. Fazio, Tony

A3. Nacamulli, Steven and Florence

A4. Nesbitt, Bryce

A5. Windfeldt, Edward W.

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**2.3 VOLUME III COMMENTORS**

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The following individuals submitted comments on the September 1995 FRDEIR/S#2DEIS. Responses to their comments are contained in Volume III of this FEIR/FEIS.

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**Federal Agencies**

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1. U.S. Department of Commerce
2. U.S. Environmental Protection Agency
- A1. U.S. Department of Transportation  
Federal Aviation Administration

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**State Agencies**

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3. California State Department of Highway Patrol, San Francisco Area
4. California State Department of Transportation (Caltrans)

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**Local Agencies**

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5. City and County of San Francisco Public Utilities Commission, Water Department
6. City of Burlingame
7. City of Millbrae
8. City of San Bruno
9. Peninsula Corridor Joint Powers Board
10. Peninsula Corridor Joint Powers Board-CAC
11. San Bruno Park School District
12. San Francisco International Airport
13. San Mateo County Transportation Authority
14. San Mateo Union High School District
15. Air Transport Association, #1

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**Organizations**

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16. Air Transport Association, #2
17. Amalgamated Transit Union Local 192
18. Coalition for a One-Stop Terminal
19. Coalition of Colma Cemeteries
20. County Council Leagues of Women Voters of San Mateo County
21. Golden Gate Audubon Society
22. Peninsula Rail 2000
23. Regional Alliance for Transit
24. San Bruno Citizens Coalition
25. San Francisco Planning and Urban Research Association
26. Sierra Club
27. South Bay Historical Railroad Society

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**Individuals and Businesses**

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28. Abtelhalim, Suhail
29. Allen, Robert
30. Amstrup, Irv
31. Amstrup, Kay G.
32. Artichoke Joe's
33. Assad, Rafik
34. Belknap, Erlys
35. Bisson-Barnes, Alice
36. Bracker, Jessie

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**Individuals and Businesses (continued)**

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37. Brun, Gottfried
38. Cameron, Charlie
39. Caniglia, Lynne
40. Cook, Theresa
41. Dittmer, Debbie
42. Dorman, Lori
43. Fiorito, Pola
44. Gipe, William
45. Gorham, Wm. S.
46. Gwathney, Margaret
47. Harber, Maureen
48. Harrison Jr., William
49. Hills, Ernest H.
50. Hinman Skinner, Joan
51. Irwin, Jerome
52. Johnson, Neal
53. Kelly, James
54. Knudsen, Bob and Gretel
55. Livengood, Carolyn
56. Lockey, Bruce
57. Mangold, Sandra E.
58. Michel, Arthur H.
59. Millbrae Serra Convalescent Hospital
60. Nesbitt, Bryce
61. Oliphant, Howard
62. Pincus, Melvin S.
63. Riechel, Robert M.
64. Schwartz, Richard S.
65. Spencer, Vonnie
66. St. Bruno's Church
67. Stein, George and Stefani, Paul
68. Taylor, Kim
69. Vernon, Bruce
70. Ward, Lyn
71. Warner, Judy
72. Zutraun, Herman

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**Speakers**

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- S1. Allen, Robert
- S2. Amstrup, Irv
- S3. Bartalini, Jack
- S4. Bernard, Kathleen
- S5. Bisson-Barnes, Alice
- S6. Bracker, Jessie
- S7. Brun, Gottfried
- S8. Burke, Patricia
- S9. Buschman, Scott
- S10. Capodammo, Dan
- S11. Carter, Jeff
- S12. Church, Mark
- S13. Cook, Theresa
- S14. Crichton, Kyle
- S15. Dittmer, Debbie
- S16. Fogarty, Janet
- S17. Hargrave, Anthony
- S18. Harriman, Tom
- S19. Hendrickson, Ray
- S20. Hills, Ernie
- S21. Hons, Emile
- S22. Irwin, Jerome
- S23. Jacobberger, Jacqueline
- S24. Johnston, Bob
- S25. Kelly, Jim
- S26. Knight, Marti
- S27. Krips, R.
- S28. Lavulo, Lola
- S29. Links, Bo
- S30. Livengood, Carolyn
- S31. Lyons, Larry
- S32. Mallory, Brenda
- S33. Mangold, Sandra
- S34. McIntosh, Teresa
- S35. Morse, Doris
- S36. Parker, Sherwood

### **Speakers (continued)**

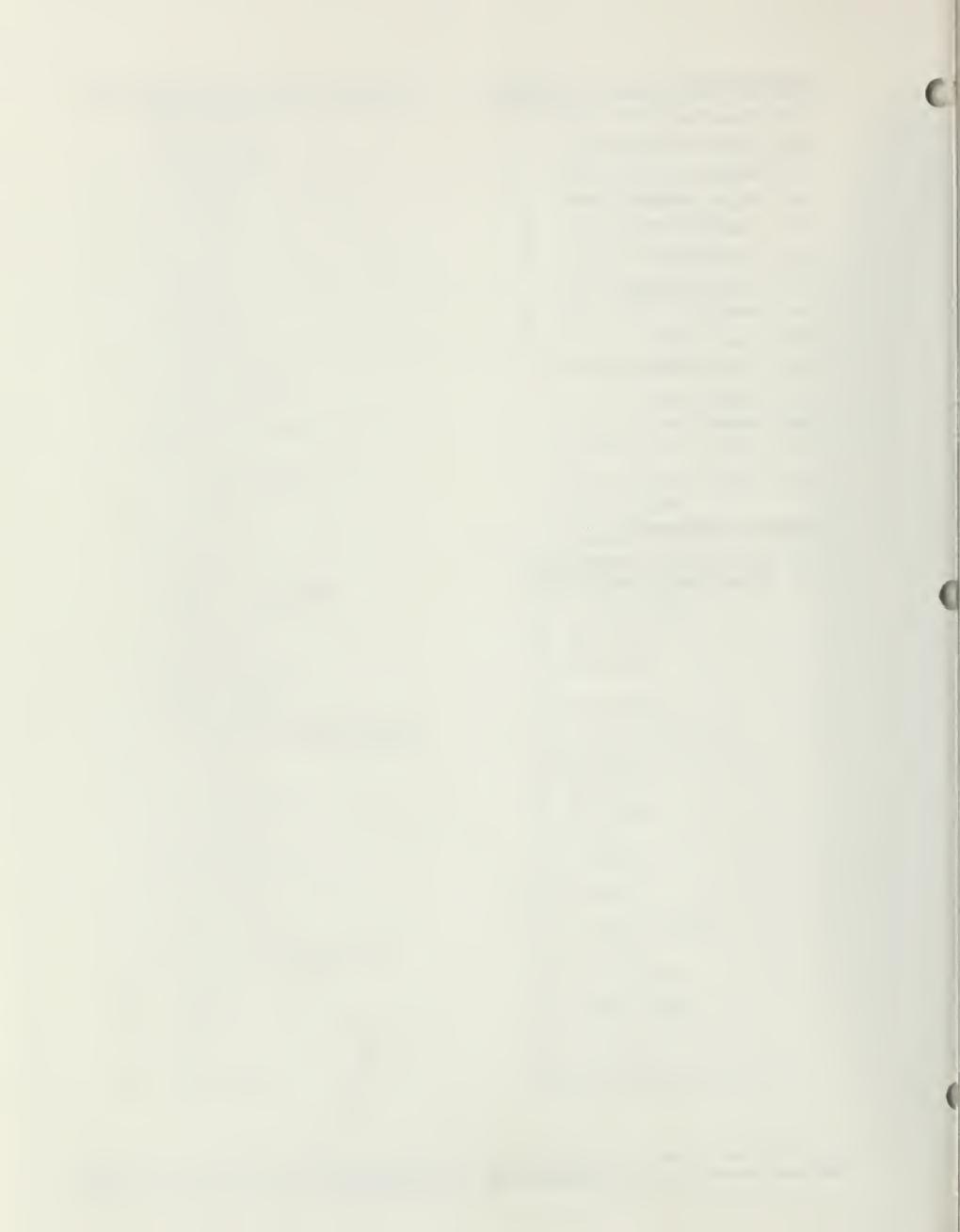
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- S37. Pincus, Melvin
- S38. Queen, Dehnert
- S39. Raiser, John
- S40. Ruggles, Stewart
- S41. Schmidt, Alfred
- S42. Schultz, Marcy
- S43. Schwartz, Richard
- S44. Simon, Ed
- S45. Spinelli, Mike
- S46. Steinberg, Marvin
- S47. Trapp, Onnolee
- S48. Twitchell, Jon
- S49. Ward, Lyn
- S50. Wheeler, Jim

### **Additional Commentors**

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- A1. U.S. Department of Transportation,  
Federal Aviation Administration



# Chapter 3

## Responses to Comments

This chapter contains responses to written and oral comments received on the DEIR/SDEIS, released for public review in January 1995. Comments have been abstracted verbatim from the comment letters or from the public hearing transcripts and responses follow immediately after each comment.

### 3.1 FEDERAL AGENCIES

#### 1. U.S. DEPARTMENT OF THE INTERIOR

- 1.1. Section 4(f) Evaluation Comments - We concur that there is no feasible and prudent alternative to the proposed project. We also concur with the proposed measures to minimize harm. Impacts and mitigation measures to park and recreation resources should be coordinated with and approved by the appropriate agency, and evidence to that effect should be documented in the Final Section 4(f) Evaluation.

**Response.** Further consultations with local agencies regarding impacts to park and recreation resources and associated mitigation measures have been held since release of the DEIR/SDEIS. These consultations and other recommendations for mitigation are documented and reflected in the Final Section 4(f) Evaluation (see Volume I of this FEIR/FEIS).

- 1.2. We recommend continued cooperation and coordination with the State Historic Preservation Officer and the Advisory Council on Historic Preservation in order to reach an acceptable Memorandum of Agreement (MOA) concerning impacts and mitigation measures to historic and archeological resources, in compliance with Section 106 of the National Historic Preservation Act, as amended. A copy of the signed MOA should be included in the Final Section 4(f) Evaluation.

**Response.** BART has developed a draft Memorandum of Agreement (MOA) that identifies the relevant parties for each specific cultural resource and the responsibilities of each of those parties under the applicable MOA. MOAs reflect that the participating parties [at minimum BART, SamTrans, FTA, the State Historic Preservation Officer, and the Advisory Council on Historic Preservation] agree on the measures to be implemented to avoid, reduce or mitigate adverse effects on historic [including archaeological] properties.) Applicable MOAs are included in this FEIR/FEIS.

The text of the DEIR/Technical Appendix is modified to clarify the MOA issue. Page 3.4-17, Mitigation Measure 6.1, Memorandum of Agreement, is revised as follows:

- 6.1 *Memorandum of Agreement.* For any adverse effects to properties determined to be eligible for inclusion in the National Register, a Memorandum of Agreement (MOA) will be required of BART, SamTrans, the SHPO, the FTA, and the Advisory Council on Historic Preservation (AChP) to specify the terms, conditions, and restrictions under which the bridge or other property may be disturbed. The Each MOA will delineate a specific mitigation plan that establishes the actions that must be taken and who is responsible for implementation. Specifically, the MOA will make explicit BART's obligations and actions for mitigation. The Each MOA will be agreed to prior to disturbance of the bridge or other property; BART will comply with all terms of the MOAs.

- 1.3. The estimates of peak acceleration ranging from 0.45g to 0.60g, or the estimate of 0.6g for peak acceleration on stiff soils are not supportable. Therefore, those statements should be deleted.

**Response.** The attenuation relationships used at the time the DEIR/SDEIS was prepared (Seed and Idriss, 1982; and Idriss, 1990) to estimate the peak ground surface accelerations on stiff and soft soil sites caused by the peak bedrock acceleration of 0.68g on the San Andreas Fault, resulted in ground accelerations of 0.60g and 0.45g, respectively. However, recent written information by Mr. William B. Joyner of the U.S. Geological Survey (USGS) (1995) states that recent reports based on recorded data from the 1989 Loma Prieta and 1994 Northridge earthquakes (Boore et al., 1993; Porcella et al., 1994; Shakal et al., 1994; and M.D. Trifunac, written communication) indicate that the estimated peak ground surface acceleration on stiff soil sites should not be less than the peak bedrock acceleration. Also based on Idriss (1991), the estimated peak ground surface acceleration on soft soil sites is 0.50g instead of 0.45g. Therefore, the text of the DEIR/Technical Appendix is modified to reflect the results of these recent studies.

Page 3.6-14, paragraph two, beginning with sentence two, is replaced by the following:

Peak ground surface acceleration on alluvium for the MCE from the equations of Boore et al. (1993) and Campbell and Bozorgnia (1994) averages to a value of 0.67g. On soft soil sites, such as those located on Bay Mud near the SFIA, the peak ground surface acceleration will probably not exceed 0.50g (Idriss, 1991). Therefore, the peak ground surface acceleration resulting from the peak bedrock acceleration of 0.68g on the San Andreas Fault is estimated to range from 0.50g to 0.67g in the project corridor, depending upon the type and thickness of the soils overlying the bedrock.

Page 3.6-15, paragraph one, sentence three is revised as follows:

The ground surface acceleration from an earthquake on the San Andreas Fault, as noted above, would be approximately 0.45g 0.50g to 0.60g 0.67g from a peak bedrock acceleration of 0.68g.

Page 3.6-25 to 3.6-26, Mitigation Measure 1.1, Seismic Design Criteria, sentence two is revised as shown below:

The maximum credible earthquake within the project corridor is a magnitude 8.0 event, occurring on the San Andreas Fault, with a peak bedrock acceleration of approximately 0.68g and peak ground surface acceleration of 0.45g 0.50g to 0.60g 0.67g.

1.4. The idea that the peak horizontal acceleration on stiff soil sites would be limited to 0.60g is not supported by the number of recordings of the moment magnitude 6.7 Northridge earthquake on alluvium for which the peak horizontal acceleration exceeded 0.90g.

**Response.** Please refer to Response 1.3 for a discussion of peak horizontal acceleration on stiff soil sites. The value of 0.67g for peak ground surface acceleration on alluvium based on the equations of Boore et al. (1993) and Campbell and Bozorgnia (1994) is a mean value and could be exceeded in some areas during a major seismic event on the San Andreas Fault. However, a structure designed in accordance with BART Seismic Design Criteria, which permits a 0.70g horizontal ground acceleration without significant damage, could be subject to higher ground motions without adverse impacts.

1.5. If the project includes any structure with periods longer than 0.3g to 0.4g, then peak acceleration is not an adequate specification of the shaking hazard, particularly for soil sites. Strong-motion data indicate that longer-period ground motions are significantly greater at soil sites than at rock sites (Boore et al., 1993).

**Response.** BART currently has proposed design response spectra for rock/stiff soil sites (S1/S2) and for soft soil sites (S3/S4). BART's design response spectra are presented in Section 16.7.2 of BART Design Criteria. This section is entitled Design Spectra and Time-Histories. Longer-

- period ground motions are significantly greater at soil sites than at rock sites (Boore et al., 1993). The USGS has developed design response spectra for Colma Formation sand and weaker Quaternary alluvium. These response spectra have zero-period accelerations of 0.73g and 0.80g, respectively, and have longer-period spectral accelerations which are significantly higher than the existing BART S1/S2 response spectra. BART is currently reviewing these new spectra to determine if they are appropriate for inclusion in the seismic design criteria and will implement appropriate revisions into the construction specifications and bid documents.
- 1.6. The report states that the BART design permits a 0.70g horizontal acceleration without significant damage and points out that this criterion is probably adequate to prevent adverse impacts as long as the structural designs have margins of safety adequate to compensate for ground motions that exceed median values and as long as the structures have periods less than 0.3g to 0.4g. The document, however, does not indicate how the longer period portions of the design spectra will be determined.
- Response.** Please refer to Response 1.5 for a discussion on the development of design response spectra for long-period ground motions. BART Seismic Design Criteria will include site-specific response spectra for periods of up to 2.5 seconds.
- 1.7. The age of most recent activity on the San Bruno fault is not as clear-cut as described on page 3.6-9 of the DEIS. Offshore geophysical surveys have detected a zone of faults that are approximately in line with the San Bruno fault as postulated onshore....Mitigation measures should include a search for evidence of the San Bruno fault and its recency of activity by (1) a geological examination and interpretation of borehole data that have been and will be acquired for the project, and (2) geological examination of all cuts made during construction of the project. If significant faulting is found, the project can be modified as appropriate.
- Response.** The text of the DEIR/Technical Appendix is modified to include a discussion of the detected offshore zone of faults which are approximately in line with the San Bruno fault as postulated onshore. The following paragraph is added to page 3.6-17, following paragraph three under Impact 1:
- Offshore geophysical surveys have detected a zone of faults that are approximately in line with the San Bruno fault as postulated onshore. This offshore zone has been mapped by McCulloch and Greene (1990). A report by Kennedy et al. (1987) states that these features are a potential geologic hazard. Evidence presented in that report indicates displacement of sedimentary deposits of late Pliocene to Quaternary age located offshore and onshore in the vicinity of Lake Merced. It is not known how far the offshore fault zone extends to the southeast. Small earthquakes that may be on the San Bruno fault have been recorded near Lake Merced and near San Francisco International Airport. In view of these uncertainties, a search for evidence of the San Bruno fault and its recency of activity will be performed before and during construction of the project alignment. This search will include various geological and geophysical investigations, including a geological examination of borehole data and a geological examination and mapping of all excavation cuts. If significant faulting is found, the project will be modified as appropriate.
- 1.8. The possibility of liquefaction of sand layers in the Bay Mud should be taken into account in the mitigation measures discussed on page 3.6-20 and elsewhere in the report.

**Response.** The text of the DEIR/Technical Appendix is modified to include the possibility of liquefaction of occasional sand layers in the Bay Mud. The following sentence is added to page 3.6-15, end of paragraph four:

Occasional sand layers known to exist locally in the Bay Mud may also be susceptible to liquefaction.

- 1.9. Several minor inaccuracies, none of which are of major importance, were noted in the DEIS. Some landslides (page 3.6-8) have occurred on the sides of San Bruno Mountain, but none are close enough to affect BART. The fault exposed near City College (page 3.6-9) is not the San Bruno fault, no surface exposures of which are known. Clayey sands (page 3.6-8) liquefy only if the clay content is quite low. Local liquefaction is a possibility near the mouth of Colma Creek, where disposal of alluvial sand sometimes causes a maintenance problem, but this is far from the BART alignment.

**Response.** As stated by the commentor, none of the listed conditions are expected to impact the project. The City College fault is not part of the San Bruno fault, and the surface exposure at City College has nothing to do with the San Bruno fault, and nothing to do with the BART extension. The City College fault lies east of the BART extension, crossing the existing BART tracks just north east of the Balboa Park Station, and trenching southeast to the east side of San Bruno Mountain. The City College fault does not cross the BART extension and is inactive. Thus, mention of it in the EIR is not warranted. For additional clarity, however, the following revisions are made to the text of the DEIR/Technical Appendix:

Page 3.6-8, paragraph seven, sentence two is replaced by the following:

Some landslides have occurred on the sides of San Bruno Mountain, but none are close enough to the project corridor to affect the proposed project.

Page 3.6-9, paragraph three, sentence five, which discusses the fault exposure near City College, is deleted.

~~The only fault exposure has been mapped near City College, but elsewhere, the fault is purely inferred and no evidence has been uncovered to show that fault has been active in the past 1.7 million years (Quaternary).~~

Page 3.6-15, paragraph three, add the following sentence after sentence four:

However, clayey sands liquefy only if the clay content is quite low.

Page 3.6-15, paragraph five, insert the following sentence after sentence one:

Localized liquefaction is a possibility near the mouth of Colma Creek, where deposition of alluvial sand sometimes causes a maintenance problem, but this area is not located near the BART alignment and would not impact the project.

## 2. U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL AVIATION ADMINISTRATION

- 2.1. The locally preferred alternative, Alternatives I and II are not eligible for airport grant funding as described in the DEIR/DEIS.

**Response.** Alternative I (No Build) and Alternative II (TSM) are not proposed to be funded with any airport grant funds, since neither project involves construction related to SFIA. The Locally Preferred Alternative (LPA) is also not proposed to be funded with airport grants.

- 2.2. The intermodal stations west of the existing airport property boundary are not eligible for airport grant funds as described (proposed San Bruno, Airport Intermodal and Millbrae Intermodal sites).

**Response.** No BART-related facilities outside the airport boundaries, including the various intermodal stations west of U.S. 101, are proposed to be funded with airport grant funds.

- 2.3. The alternative to construct an underground tunnel on the airport property is not covered in adequate detail. This detail must include an analysis and method of handling disruption to aeronautical operations and airport access during construction. The Director of Aviation has verbally expressed strong opposition to underground access to the new International Terminal.

**Response.** The DEIR/Technical Appendix evaluates in sufficient detail the environmental impacts associated with Alternative VI, which features an underground tunnel into and out of the proposed International Terminal. The document concludes that there would be no impacts to air travelers or ground transportation due to construction of the bored tunnel (see page 3.13-48). Airport operations and access would not be affected since tunneling activities on airport property east of Highway 101 would take place below grade and would not result in surface disruptions. Regular meetings between SFIA and BART staff have been held to review and coordinate details between the BART extension and the proposed airport expansion under the SFIA Master Plan. Please refer to the 1992 Master Plan EIR for analysis of construction impacts on airport access and aeronautical operations.

The Aerial Design Option LPA does not involve tunnel access below the Aircraft Operations Area (AOA) or the planned International Terminal. Rather, access to the SFIA would be provided with aerial guideways.

- 2.4. Major investigation for hazardous material is necessary in the areas where below-ground construction is anticipated.

**Response.** As noted by the commentor, additional investigation of potential hazardous materials in areas of subsurface construction will be required. During preliminary engineering for the northern portion of the extension (between Colma and San Bruno), a database search, physical inspection of the right-of-way, and an information review were conducted, the results of which are contained in the Hazardous Materials Technical Report and summarized in Section 3.11, Public Health and Safety of the DEIR/Technical Appendix. Information gathered through this process provides the basis for determining which sites should be targeted for a Phase I and Phase II environmental assessment. This same process will be followed for the southern segment of the extension that traverses the SFIA property. These activities will be conducted as part of the preliminary design phase for the Aerial Design Option LPA, selected by BART and SamTrans in November 1995. Table 3.11-1 in Section 3.11 identifies 32 sites that are deemed to be of highest priority for further investigation throughout the project corridor based upon information gathered to date.

- 2.5. Underground construction compared to above ground or an elevated system must be analyzed in detail from an environmental impact view point in addition to cost benefit.

**Response.** It is not possible to analyze in detail the impacts of an at-grade or aerial configuration versus a below-grade alignment without considering the particular environmental setting along the segment in question. However, some general observations about the impacts typically associated with surface and below-grade alignments can be made. Because at- and above-grade configurations involve surface construction and operation activities, they may result in greater visual, airborne noise, biological, and surface drainage impacts, while below-grade configurations involve greater risk of encountering subsurface hazardous contamination and creating geologic and soils instabilities.

- 2.6. The impact to air quality must conform to appropriate standards.

**Response.** Section 3.10 of the DEIR/Technical Appendix identifies the project's potential air quality impacts. These impacts are determined based on the project's conformance to applicable federal and state ambient air quality standards (see page 3.10-9 of the DEIR/Technical Appendix for the specific significance criteria used to evaluate air quality impacts). The project would not cause any violations of state or federal air quality standards. The air quality impacts of

construction activities and proposed mitigations are discussed on pages 3.13-197 to 3.13-206 of the DEIR/Technical Appendix.

- 2.7. The need to address local issues and environmental concerns is paramount. In order to resolve issues to the benefit of the airport and to respond to the demand for mass transit, expansion to Millbrae is recommended.

**Response.** One of the purposes of preparing the DEIR/SDEIS was to solicit public opinions regarding the merits of the different alternatives. Another purpose was to identify impacts affecting local jurisdictions and the SFIA. Commentors' input on this important decision is greatly appreciated and was considered by the BART and SamTrans Boards when they selected a new LPA after the close of the public review and comment period. In November 1995, both Boards selected a design option to Alternative VI as the LPA and the project alignment upon which to perform additional environmental analyses. The Alternative VI Aerial Design Option extends BART service from Colma directly to the San Francisco International Airport via stations at Hickey in South San Francisco and Tanforan in San Bruno, and then southward to a terminus, intermodal station at Millbrae Avenue (see Chapter 1 of this document for a more complete description of this alternative). It should be understood that the selection of the Aerial Design Option of Alternative VI as the LPA does not preclude improvements to CalTrain service and its possible extension to a downtown San Francisco terminus. The Metropolitan Transportation Commission's Resolution 1876 which identifies the Bay Area's rail transit priorities still applies and includes the BART extension to the airport, the Tasman light rail project in San Jose, and the CalTrain extension to downtown San Francisco. The proposed funding agreement between BART and SamTrans is calculated to ensure that SamTrans can meet its commitments to bus service, to paratransit bus service for the mobility impaired, and to CalTrain service. The approval of a particular BART extension alternative will not occur until after the completion of the environmental review process and further evaluation of the project's economic and funding viability, environmental implications, and engineering feasibility.

### 3. U.S. ENVIRONMENTAL PROTECTION AGENCY

- 3.1. It does not appear that the locally preferred alternative (LPA) [addressed in the DEIR/SDEIS] is the least environmentally damaging practicable alternative (LEDPA) from a wetlands/protected species vantage point and, in fact, the LPA is identified in the SDEIS as having the second highest impact to aquatic resources. Per the NEPA/404 MOU, the FEIS must clearly demonstrate that the final selected alternative under NEPA is the least environmentally damaging practicable alternative under [the Clean Water Act].

**Response.** BART has been in consultation with the EPA and other state and federal agencies in accordance with the requirements of the NEPA/404 MOU. On April 27 and 28, 1995 BART and SamTrans Boards selected Alternative VI, BART to Millbrae via the planned Airport International Terminal as the Locally Preferred Alternative (LPA), superseding the LPA selected in 1992 at the conclusion of the Alternatives Analysis/DEIR/DEIS. They determined this alternative to be the LEDPA. The EPA, USFWS, and USCOE all provided BART with written preliminary agreement on this LPA as the LEDPA. The selection of the LPA is documented in more detail in the BART-San Francisco Airport Locally Preferred Alternative Report, May 1995. Subsequent to this decision, consideration of other design options to Alternative VI to bring BART service into the San Francisco International Airport (SFIA) was prompted by actions of the U.S. Congress, BART, and the San Francisco Airports Commission related to project costs and implementation of the 1989 SFIA Final Draft Master Plan. Details of these actions are defined and described in the Focused Recirculated Draft Environmental Impact Report/Supplemental #2 Draft Environmental Impact Statement (FRDEIR/S#2DEIS). The FRDEIR/S#2DEIS was released in September 1995. On November 28, 1995 the BART and SamTrans Boards identified the Aerial Design Option of Alternative VI as the new LPA. The EPA, USFWS, and USCOE have provided written preliminary agreements that the new design option is now the LEDPA. These written agreements are incorporated in Volume V of this FEIR/FEIS.

- 3.2. Additionally, as required by the NEPA/404 MOU, the FEIS should provide written documentation from the US Fish & Wildlife Service that the project mitigation is acceptable and that the project will not adversely affect species listed under the federal Endangered Species Act; and that the project has received water quality certification or a waiver under CWA Section 401 (from the Regional Water Quality Control Board).

**Response.** As noted in Response 3.1, the Aerial Design Option LPA was selected in late November 1995. An appropriate mitigation plan has been developed and approved in discussions with USFWS as part of the Section 7 consultation. A Biological Assessment (BA) has been prepared in accordance with Section 7 of the Federal Endangered Species Act. The BA contains a mitigation plan to address project impacts to the endangered San Francisco garter snake and the threatened California red-legged frog. The USFWS has issued Biological Opinion which concludes that the proposed project would not likely jeopardize the continued existence of the SFGS and California red-legged frog. The appropriate certificates and/or waivers will be acquired from the Regional Water Quality Control Board (RWQCB) in conjunction with the Section 404 permit for which BART has applied. BART has submitted its Section 404 permit application with a mitigation plan for the placement of fill in wetlands and waters of the U.S. to the U.S. Army Corps of Engineers (USCOE). The USCOE has issued a public notice and a preliminary agreement to issue a 404 permit for BART's application which was reviewed by the other federal and state agencies including the Environmental Protection Agency (EPA) and U.S. Fish and Wildlife Service (USFWS). The mitigation plan in the 404 permit application was revised in accordance to the comments received from the agencies and the USCOE. The USCOE, USFWS, and EPA have each provided BART with a letter in which they preliminarily agree on the proposed mitigation plan. The BA, BO, Public Notice on the Section 404 permit application, Proposed Mitigation Plan, and all three preliminary agreement letters are in Volume V of this FEIR/FEIS and should be reviewed for additional details.

- 3.3. When developing its FEIS, the lead Federal agency or State agency must obtain written preliminary agreement from the COE and EPA that a final preferred alternative (under NEPA) is the least environmentally damaging practicable alternative (under CWA Section 404). Your FEIS should reflect these requirements.

**Response.** Please refer to Response 3.1 for a discussion of the NEPA/404 MOU and identification of the LEDPA.

- 3.4. Should BART clearly demonstrate that there is no less damaging practicable alternative to the placement of fill in wetlands and other waters of the United States, the conceptual mitigation plan in the SDEIS should be further refined. Additionally, the NEPA/404 MOU requires written preliminary agreement from the US Fish & Wildlife Service on the adequacy of the project's Section 404 mitigation, as well as written agreement from the COE and EPA that the mitigation plan and implementation schedule for unavoidable wetlands loss is adequate.

**Response.** Please refer to Response 3.2 for a discussion of the NEPA/404 MOU and the mitigation requirements.

- 3.5. As required by the NEPA/404 MOU, the FEIS needs to document that the project is acceptable to the US Fish & Wildlife Service in terms of mitigation for impacts to species and habitat protected under the Endangered Species Act.

**Response.** Please refer to Response 3.2 for a discussion of the NEPA/404 MOU and the mitigation requirements.

- 3.6. As required by the NEPA/404 MOU, the FEIS needs to document the project's consistency with the requirements of Section 401 of the Clean Water Act (i.e., water quality certification or waiver from the Regional Water Quality Control Board).

**Response.** The Regional Water Quality Control Board will issue the water quality certification in conjunction with Section 404 permit for the project. The DEIR/Technical Appendix is revised on page 3.13-146 to add the following at the end of paragraph 2 under Impact 1:

Those releases that are discharged to navigable waters are regulated by the Clean Water Act and subject to certification or waiver under Section 401 of this statute. The Regional Water Quality Board will issue water quality certification in conjunction with the 404 permit for the project.

- 3.7. Under the NEPA/404 MOU...issuance of this SDEIS and the 404 public notice should have been "closely coordinated." This does not appear to be the case.

**Response.** BART, SamTrans, and FTA have been in close coordination with the San Francisco District office of the USCOE as directed in the NEPA/404 MOU. Although the MOU indicates that a Section 404 public notice should be circulated at the time the DEIS is released, the District office of the USCOE indicated that it would prefer to have a public notice on the new LPA rather than on the various alternatives addressed in the DEIS. The FTA environmental review process does not identify the LPA until after the DEIS is released. Therefore, the district offices of USCOE waived the public notice requirement at that time. BART has subsequently completed and submitted its Section 404 application to the USCOE and the USCOE has released its public notice on the permit application.

- 3.8. We are concerned with the general lack of discussion regarding the potential contamination of...[the] aquifer, which supplies a portion of the public drinking water supply for Daly City, Colma, South San Francisco and San Bruno....How many residents in the projected area derive some portion of their drinking water from the aquifer?

**Response.** Please refer to pages 3.8-18 and 3.13-148 of the DEIR/Technical Appendix, respectively, for mitigation measures to minimize the long- and short-term exposure of local water supplies (underlying aquifers) to contamination from the shallow perched aquifer. The potential for contamination of underlying aquifers could occur in areas where the shallow perched aquifer is contaminated and the proposed construction extends below the shallow aquifer bottom into the underlying aquifer. The portion of total water used supplied by groundwater for these communities in 1994-1995 is as follows: South San Francisco/Colma, 17 percent; Daly City, 39 percent; and San Bruno, 47 percent.

As described in the mitigation measures, any contamination in the shallow perched aquifers along the alignment will be identified by the project-specific geotechnical investigation and monitored during construction. If perched water is encountered during construction, it would be contained, tested, and treated in an appropriate manner. In areas where the natural sealing layer is penetrated, sealants such as slurry walls, sealing grouts, or other appropriate methods as best suited to the site conditions will be used to minimize the communication of underlying aquifers with shallow perched aquifers.

- 3.9. What type of sealing method will be used should there be a break of the natural impervious layer? Will sealing be completely effective or could contaminants still enter the aquifer should the natural impervious layer be broken by BART construction?

**Response.** Should there be a break in the natural sealing layer, sealants such as slurry walls, sealing grouts, or other appropriate methods based-on the results of site-specific geotechnical investigations performed during the project design will be used to reduce any contamination to an insignificant level. These methods have been proven effective in many applications under conditions similar to those existing along the project corridor. Please refer to Response 3.8 for additional information regarding mitigation for breaching of the natural impervious layer.

- 3.10. If contaminants do enter the aquifer, what provision is there to remedy the damage, and are there alternative water supply sources for area residents?

**Response.** Please refer to Response 3.8 for a discussion of mitigation measures to be employed if contaminants enter the aquifer. An alternative water source to the groundwater aquifer would be the Hetch Hetchy water system operated by the City of San Francisco. This water is transported to San Francisco in pipelines whose alignment approximately parallels the BART alignment. The Hetch Hetchy system supplies water to many communities in San Mateo County through contracts between these communities and San Francisco.

- 3.11. Will there be any monitoring during or after project construction to ensure that there is no contamination of the aquifer? If so, who would be responsible for aquifer monitoring?

**Response.** As outlined on page 3.13-148 of the DEIR/Technical Appendix, the contractor will monitor shallow perched groundwater for contamination encountered during excavation. If the impervious layer below a perched aquifer with known contamination is breached, remedial actions will be implemented (please refer to pages 3.8-18 and 3.13-148) and monitoring wells will be installed in the underlying aquifer below the breached confining layer to investigate the effectiveness of the mitigation measure. Monitoring will continue for a period of one year after implementation of the mitigation measure. Details of the monitoring program will be made available to the appropriate regulatory agencies. The program will specify the responsible entity, the frequency of measurement, and the constituents to be monitored, and will be formulated to satisfy state and federal requirements regarding review of a mitigation measure's implementation and effectiveness.

- 3.12. The FEIS should state whether or not the analysis undertaken meets the requirements of the U.S. Department of Transportation's (DOT) environmental justice strategy, which we understand was finalized earlier this year, and whether the analysis is consistent with Executive Order 12898.

**Response.** The environmental justice analysis in the DEIR/SDEIS was designed specifically to address the President's Executive Order No. 12898 and, indeed, is consistent with this Executive Order. The analysis in the DEIR/SDEIS identifies and addresses, as appropriate, "disproportionately high and adverse human health or environmental effects...on minority populations and low-income populations" (Executive Order, §1-101). Similarly, BART, in conjunction with FTA (an operating administration under DOT) has ensured that this analysis complies with DOT's Environmental Justice Strategy and is consistent with the methodology for evaluating environmental justice impacts in DOT's proposed order on environmental justice. The analysis in the DEIR/SDEIS evaluates whether the project "is likely to have a disproportionately high and adverse human health or environmental effects on low-income or minority populations." And, as part of this process, there has been "appropriate and meaningful opportunities for comment by representatives of affected communities" (DOT, Environmental Justice Strategy, June 6, 1995).

- 3.13. The Supplemental Draft EIS (SDEIS) and its accompanying documentation is an exceedingly long document, several thousand pages in length. We strongly encourage your agency to greatly limit the amount of documentation circulating for review on future projects.

**Response.** The fact that the project must satisfy the California Environmental Quality Act (CEQA) as well as the National Environmental Policy Act (NEPA), and involves multiple alternatives and design options contributes greatly to the required documentation. The shorter "Summary DEIR/SDEIS" is more in compliance with NEPA and Council on Environmental Quality guidelines regarding document length.

- 3.14. The SDEIS (page 1-5) states "CEQA requires an analysis of growth-inducing and cumulative impacts, while NEPA requires neither." This statement, as regards NEPA, is incorrect. Federal EISs must address both indirect and cumulative effects.

**Response.** To correct the error, the second bullet at the top of page 1-5 of the DEIR/Technical Appendix is deleted:

CEQA requires an analysis of growth-inducing and cumulative impacts; while NEPA requires neither. The DEIR/SDEIS incorporates both types of impacts.

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### 3.2 STATE AGENCIES

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#### 4. CALIFORNIA STATE DEPARTMENT OF FISH AND GAME

- 4.1. The Department's evaluation of the impacts and proposed mitigation are that it is highly probable that, even with the proposed mitigation, the continued survival of the SFGS on the site would be jeopardized. The proposed intermodal facility would result in the loss of prime habitat for the species. Construction activity associated with a freeway ramp and ALRS facilities would result in the loss of prime habitat for the species. Construction activity associated with a freeway ramp and ALRS facilities would result in the direct loss of SFGS habitat, as well as contribute to fragmentation of the area restricting snake movements to feeding areas. Impacts would be similar for the Least Cost I-380 alternative and Alternative III.

**Response.** The California State Department of Fish and Game (CDFG) is concerned that those alternatives that contain an intermodal station, associated freeway on- and off-ramps, and the ALRS on the west of Bayshore parcel would jeopardize the continued survival of the SFGS on the west of Bayshore parcel. These alternatives include the 1992 LPA, its least cost design option, Alternative III, and the TSM alternative. BART has factored this concern in its selection of the new Aerial Design Option LPA.

- 4.2. The Department recommends Alternative VI as the least damaging to wildlife resources and sensitive and endangered species.

**Response.** This recommendation was considerable in the selection of Alternative VI as the least environmental damaging and practicable alternative (LEDPA) in May 1995. For further details on BART and SamTrans' selection of the new LPA and LEDPA in November, 1995, please refer to Response 3.1.

- 4.3. We believe that wetlands of more value to wildlife could be created by consolidating the required mitigation at one site within the project area. This alternative should be considered when developing final wetland mitigation plans for wetland impacts outside of the west of Bayshore parcel.

**Response.** This comment has been taken into consideration in developing a mitigation plan for the loss of wetland habitats and one single wetland habitat creation site has been prepared along Colma Creek near Oak Street in South San Francisco. Other sites are also being considered to ensure sufficient wetland replacement, particularly for wetlands within endangered species habitat. Details of this proposed mitigation site were provided to the USCOE in a Section 404 permit application and subsequent Public Notice issued by the USCOE (see Volume V of this FEIR/FEIS).

- 4.4. The document discusses a HRP for the SFGS developed previously. This plan would consolidate habitat on an 18-acre area at the southern end of the west of Bayshore parcel. The Department does not believe that this plan, as conceptually proposed, would allow for the maintenance of a viable SFGS population on the site.

**Response.** The Habitat Restoration Plan is no longer under consideration due to objections by resource agencies. Since the release of the DEIR/SDEIS, BART has continued consultations with

the USFWS, CDFG, USCOE, and SFIA and further defined the mitigation plans for impacts to species protected under the Federal Endangered Species Act. A mitigation plan is defined in detail in the Biological Assessment (BA) and in the USFWS Biological Opinion (BO), provided in Volume V of this FEIR/FEIS. The mitigation plan includes (among other measures):

- 1) Mitigation measures during project construction.
  - SFGS fencing of construction and preconstruction areas.
  - Temporary construction of road trestle above wetlands.
  - Biological monitoring program.
- 2) Habitat enhancement measures.
  - Hydrology study of the west of Bayshore parcel.
  - Enhancement of seasonal wetlands at the southern end of the west of Bayshore parcel.
  - Management of tidal gates on Cupid Row Canal to enhance SFGS habitat.
  - SFGS capture feeding program during project construction.
  - Development and implementation of a bullfrog abatement program.

The reader should refer to Volume I and to the BA and BO in Volume V of this FEIR/FEIS for more details on the approved mitigation program for the SFGS and California red-legged frog.

## 5. CALIFORNIA STATE DEPARTMENT OF TOXIC SUBSTANCES CONTROL

- 5.1. Section 11 of the Draft EIR states that 265 known and potentially hazardous sites may exist within the project. Since no information was provided as to what contamination is present, the draft EIR has not identified potential impacts or mitigation measures to address these impacts. This contamination must be fully characterized and if necessary appropriate mitigation measures must be developed.

**Response.** The 265 known and potentially hazardous sites discussed in the DEIR/Technical Appendix were identified based on their geographical proximity to any one of the project alternative alignments. These sites are discussed in greater detail in the Hazardous Materials Technical Report, which notes that the precise nature and extent of contamination at many of these sites has yet to be determined. The lack of detailed information at this time does not preclude the ability to generally identify potential risks to human health and the environment posed by these sites and to develop mitigation measures to avoid or reduce the hazards associated with the sites. It is not necessary for a complete Phase I and II hazardous materials site investigation to have been completed prior to undertaking an environmental impact assessment pursuant to CEQA and NEPA. Such investigation will take place prior to property acquisition and construction activities (see page 3.11-10 of the DEIR/Technical Appendix).

As noted in Section 3.11, Construction/Public Health and Safety, construction activities for each of the build alternatives could result in the discovery of previously unidentified hazardous materials in the soil and/or groundwater, particularly along portions of the alignment which are in cut-and-cover subway, bored tunnel, or retained cut configurations (see Impact 1 on page 3.13-207 for the 1992 LPA). Consequently, workers, the public, and/or the environment could be exposed to soils, soil gases, or groundwater contaminated with hazardous materials. To reduce the potential of exposure to hazardous materials to insignificant level, the DEIR/Technical Appendix recommends Mitigation Measure 1.1, development of a Hazardous Materials Contingency Plan, and Mitigation Measure 1.2, site sampling and remediation (see pages 3.13-207 and 3.13-208 of the DEIR/Technical Appendix).

## 6. CALIFORNIA STATE DEPARTMENT OF TRANSPORTATION (CALTRANS)

- 6.1. A complete traffic impact and ramp operational analysis will be required by Caltrans prior to considering any new ramp connections.

**Response.** Further operational analysis will be performed prior to implementing any new freeway ramp connections.

- 6.2. The document did not provide for our review the assumptions and methodology used in developing this project's baseline year [1993]. Please clarify.

**Response.** The Transportation Technical Report provides more details on the assumptions and methodology used to develop the traffic forecasts for the project's baseline year of 1993 than is contained in the DEIR/SDEIS and the DEIR/Technical Appendix. Further details on assumptions and methodology can be found in Section 2.1, Metropolitan Transportation Commission (MTC) Mode-Choice and Highway Model Projections, on pages 6 to 16 and in Section 2.4, Traffic Projections, on pages 29 to 48 of the Transportation Technical Report.

- 6.3. The No Build alternative is incorporated into the 1993 existing conditions as well as in future years of 1998 and 2010. The No Build alternative should only be used for 1998 and 2010 to provide a base for comparison of alternatives.

**Response.** The project's baseline year of 1993 was used to analyze current conditions, i.e., when the study began, and the transportation impacts of each alternative were assessed for this baseline year as required by the California Environmental Quality Act (CEQA). Specifically, CEQA requires that a project be analyzed in a manner that illustrates the changes to the *existing* conditions, even if a project as complicated as the BART extension would take several years before revenue service would actually begin. The analysis of a project alternative for these baseline year conditions allowed assessment of direct impacts without cumulative growth which must be included in forecasts for analysis years 1998 and 2010. Analysis under the baseline year provides one more view of the project's impacts without including forecasts of future conditions.

- 6.4. The document uses traffic projections for the year 2010, about 10 years after completion of construction. Caltrans and FHWA normally require a 20 year horizon, after completion, for geometric design of new facilities affecting state's highways. For this project, the horizon year would be 2020.

**Response.** The forecasts of transit patronage, mode choice for access, and traffic impacts were based on the regionally approved MTC travel demand model. At the time MTC staff performed this study, the available horizon year was 2010. The analysis year 2010 provides analysis of transportation impacts under "buildout" conditions when new patterns of travel affected by the project have been well established. Forecasts of future transportation conditions are based on socioeconomic projections of population and employment. The nature of these projections become more uncertain as the forecasts are projected farther into the future.

- 6.5. [On] page 3.1-24 [of the Summary DEIR/SDEIS], under "Intersections," the document does not provide an analysis of turning movements for the Hickey Station Exit and Hickey Extension, Chestnut and Grand, and El Camino Real Boulevard (Route 82) at Sneath Lane. Thus we are unable to assess the impacts and prescribed mitigation for these intersections.

**Response.** Chapter 3.1, Transportation, in both the Summary DEIR/SDEIS and the DEIR/Technical Appendix, contains summary tables of levels of service for significantly impacted intersections. Results of the level of service analysis for all 97 intersections studied are contained in Appendix C of the DEIR/Technical Appendix. Also, the calculation sheets, which include turning movements, used to determine the levels of service for all 97 intersections under all

alternatives in each analysis year are included as appendices to the Transportation Technical Report. The three intersections listed are among the 97 intersections studied.

- 6.6. Page 3.1-25 [of the Summary DEIR/SDEIS], item 10, "Improvements to the Intersection of El Camino Real and Millbrae Avenue." The "no feasible" mitigation is not adequate for an intersection of this magnitude.

**Response.** In order to address BART-related impacts at the El Camino Real/Millbrae Avenue intersection, a feasible potential intersection improvement was identified and is described on page 3.1-13 of the FRDEIR/S#2DEIS. This improvement would widen the east leg of Millbrae Avenue to create an additional eastbound through lane to receive traffic from the other three legs of the intersection. This plan to increase traffic capacity at this intersection would involve land and a business acquisition, as well as retrofitting the Millbrae Avenue overpass. This improvement would upgrade traffic operations at the El Camino Real/Millbrae intersection to an acceptable level under Alternative VI and the Alternative VI Aerial Design Option.

The suggested mitigation measure listed in the FRDEIR/S#2DEIS calls for BART to contribute its fair share of the cost of constructing the improvement. This contribution would be based on the cost of widening Millbrae Avenue to create an additional eastbound through lane. It is within the legal authority of other agencies (Caltrans and the City of Millbrae) to be responsible for constructing this improvement. Another possible traffic improvement might be the City of Millbrae's proposed extension of California Avenue to an extended Victoria Avenue with a new BART garage located in the vicinity of the intersection of these two extended streets.

Whatever mitigation is to be selected by the City of Millbrae in coordination with Caltrans, the BART-San Francisco Airport Extension project's contribution would be limited to the amount required to widen Millbrae Avenue as described above.

- 6.7. Page 123, Design Appendix, Figure 6 Airport Intermodal Station Site Plan. The document should include a diagram that shows how the new northbound US 101 on-ramp will impact US 101 connector ramps to the San Francisco International Airport.

**Response.** The Airport Intermodal Station referenced in the comment, as appears on page 123 of the Design Appendix, applies to the 1992 LPA and Alternative III. The ramp connections from the Airport Intermodal Station to Highway 101 under these alternatives are graphically illustrated in Figure 2.2-9, CalTrain/BART Airport Station Access for Proposed Project, the TSM and Base Case Alternatives, on page 2-22 of the DEIR/Technical Appendix.

- 6.8. Page 131, Design Appendix, Figure 9 "Millbrae Intermodal Terminal Site Plan." We are concerned about peak hour traffic impacts on US 101 if a southbound on-ramp and a northbound off-ramp are constructed from US 101 to the Millbrae Intermodal Station. The document should provide mitigation measures for peak hour traffic impacts on mainline US 101.

**Response.** The impacts of the southbound Highway 101 on-ramp with the Millbrae Intermodal Station under Alternative IV are discussed on pages 3.1-140 and 3.1-141 and under Alternative V on page 3.1-146 of the DEIR/Technical Appendix. Alternatives IV and V are the only alternatives with the Millbrae Intermodal Station. The proposed mitigation for this significant impact is to extend the southbound auxiliary lane (sixth lane) for 1,400 feet from south of the SFIA on-ramp merge to the southbound off-ramp to Millbrae Avenue. No significant impacts were identified for the northbound off-ramp from Highway 101 to the Millbrae Intermodal Station.

- 6.9. Page 137, Design Appendix, Figure 11 "Millbrae Avenue BART/CalTrain Station Site Plan." We are concerned that the parking facility may be too close to the southbound US 101 on and off-ramps. We are also concerned about the possibility of traffic queuing onto southbound US 101. The document should provide mitigation measures for these concerns.

- Response.** According to the subarea traffic modeling results, few vehicles would travel southbound on Highway 101 to the Millbrae Avenue Station because they would be traveling south to ride a northbound BART train when other stations to the north would be available. The adequate level of service at the Millbrae/Rollins intersection suggests that traffic queuing at the intersection would not interfere with operations of the off- and on-ramps for Highway 101 at Millbrae Avenue. The planned improvement to Highway 101 southbound off-ramps at Millbrae Avenue by the City of Millbrae in coordination with Caltrans will change traffic patterns to minimize the possibility of traffic queuing onto southbound Highway 101.
- 6.10. Pages 3.1-93 and 3.1-95, Technical Appendix, Figures 3.1-4 "Existing 1993 Traffic Volumes A.M. Peak Hour" and 3.1-5 "Existing 1993 Traffic Volumes P.M. Peak Hour" should show forecast traffic volumes increasing from existing peak conditions to peak future conditions (1998 and 2010).
- Response.** Figures 3.1-4 and 3.1-5, are already quite crowded with information. For readability, the requested information is presented in a tabular format instead (i.e., Table 3.1-72, Freeway Level of Service-1993, Table 3.1-74, Freeway Level of Service-1998, and Table 3.1-76, Freeway Level of Service-2010 in the DEIR/Technical Appendix). The detailed turning volumes to all the intersections analyzed are also available as appendices to the Transportation Technical Report.
- 6.11. Pages 3.1-93 and 3.1-95, Technical Appendix, Table 3.1-72 analysis is for northbound A.M. peaks and for southbound P.M. peaks. However, in Figures 3.1-4 and 3.1-5, peak A.M. and P.M. traffic travels in the opposite direction. In addition the peak hour freeway volumes in Figure 3.1-4 and 3.1-5 seem high.
- Response.** Northbound traffic on Highway 101 during the A.M. peak hour and southbound traffic on Highway 101 during the P.M. peak hour were analyzed in the DEIR/SDEIS because these are the peak directions of BART patrons accessing or egressing the BART stations by automobile. For example, approximately 550 vehicles would enter the Millbrae Avenue Station from Highway 101, during the A.M. peak hour under Alternative VI and the Alternative VI Aerial Design Option (in 2010), and all of these trips would be traveling northbound on Highway 101. In contrast, after dropping off BART patrons, approximately 100 vehicles would leave the station to return southbound on Highway 101 during the A.M. peak hour. In the P.M. peak hour, an estimated 490 vehicles would egress from the Millbrae Avenue Station and travel southbound on Highway 101 under Alternative VI and the Alternative VI Aerial Design Option in 2010, and 55 vehicles would enter this station traveling northbound on Highway 101.
- The existing 1993 traffic counts show that in the A.M. peak hour, the peak travel direction on Highway 101 is toward the airport (i.e., southbound at San Bruno Avenue Interchange and northbound at the Millbrae Avenue Interchange). Further south, between the Peninsula and 3rd Avenue Interchanges, the freeway counts indicate that the traffic volumes were virtually identical in both directions during the A.M. peak hour. Please note that the traffic counts for Highway 101, south of the San Bruno Avenue Interchange, include the I-380 frontage lanes that are merging at that point with mainline traffic.
- 6.12. Reference is made to Tables C-16 through C-24 in Appendix C (Traffic). In relationship to State Route 82 (El Camino Real), is this type of intersection control indicated, considered mitigation for the project, or is it assumed that this type of intersection control will be there?
- Response.** The type of intersection control listed in Tables C-16 through C-24, which provides the level of service for each intersection analyzed for every alternative, is the current type of control for all existing intersections. New intersections have the proposed type of intersection control as designed under that alternative. Table 3.1-70, Analysis Intersection Existing or Proposed, in the DEIR/Technical Appendix lists the intersections that are new.

- 6.13. For the Millbrae Intermodal Terminal Site, the ramp connection to and from Route 101 will have significant impact to Route 101 traffic during peak hours. What is the proposed mitigation measure?

**Response.** Please refer to Response 6.8 for a discussion of mitigation measures to the new ramp connections to Highway 101 under Alternatives IV and V.

- 6.14. For the BART station at the SFIA terminal, how does the proposal interact with the airport expansion plan? Will the light rail system interfere with the proposed airport flyover ramps?

**Response.** The BART subway station adjacent to the proposed International Terminal at SFIA was located to have minimal impact on the functional elements of the Terminal complex as proposed by the SFIA Master Plan while still providing convenient access directly into the ticketing and arrivals hall of the complex. BART patrons could also access the Airport Light Rail System in the same manner as other airport users in the International Terminal. Under this proposal, certain elements of the BART station would have to be accommodated in the design and construction of selected elements of the Airport Master Plan project.

The light rail system is being designed by the Airport to avoid interference with the proposed airport flyover ramps to Highway 101.

The Aerial Design Option LPA is designed to cross over Highway 101 and the new SFIA flyover ramps. The design and location of piers and foundations will be coordinated with the SFIA flyover ramps.

- 6.15. For airport Intermodal station site, how does the new ramp to northbound Route 101 affect the airport connector ramps on Route 101? How is the additional traffic to Route 101 to be mitigated?

**Response.** For the 1992 LPA and Alternative III, a new ramp would cross over Highway 101 and connect directly with the elevated section of the northbound SFIA/I-380 viaduct with left-hand entrance. The projected traffic volume from the Airport Intermodal Station to the north is small, less than 50 vehicles in the P.M. peak hour when the volumes would be the greatest. The ramp would carry significant traffic volumes only if the SFIA developed land on the west side of Highway 101, or if the traffic from San Bruno and Millbrae could access northbound Route 101 from this ramp. The DEIR/SDEIS assumed that there would be no development of SFIA land west of Highway 101 because development of this land is not in the SFIA current master plan. The DEIR/SDEIS also assumed for the 1992 LPA, that traffic access to the Airport Intermodal Station by residences in San Bruno or Millbrae would be prohibited. Under Alternative III, intersection turn restrictions at the ramp connections would discourage non-BART motorists from accessing or exiting the freeway since they would be required to go through the BART parking lot in order to gain access to or from Highway 101 ramps. The latest SFIA Highway 101 ramp improvement project's traffic projections for the year 2018 indicate that the northbound I-380 viaduct would carry an estimated 730 vehicles per hour (vph) in the A.M. peak hour, 2,330 vehicles in the midday peak hour, and 875 vehicle in the P.M. peak hour. With two lanes, the viaduct has a capacity of over 3,600 vehicles per hour. Traffic from the BART station would not have a significant impact on the viaduct or on the northbound Highway 101 mainline traffic. In fact, BART would reduce the traffic on Highway 101 north of the SFIA.

- 6.16. For the Millbrae Avenue BART/CalTrain Station site, the entrance to the proposed parking area is too close to the on/off ramps to Route 101, what is the mitigation measure to eliminate the possibility of queuing onto the southbound Route 101 traffic and blockage of the entrance to the southbound Route 101 on ramp.

**Response.** Please refer to Response 6.9 for a discussion of the Highway 101 impacts at the Millbrae Avenue Station under Alternative VI.

6.17. Page 3.9-20 [of the Summary DEIR/SDEIS], item 20 under "Highway 101 Ramps," it is stated that "a concrete barrier approximately 3 to 4 feet high will be installed along the edges of the highway ramps, i.e., New Jersey-style barriers, to reduce noise impacts on homes." According to Caltrans' Highway Design Manual, the minimum height of concrete barriers should be six feet and should intercept the line of sight from the exhaust stack of a truck to the receptor.

**Response.** The ramps for Highway 101 are part of the 1992 LPA, the TSM Alternative, the Base Case Alternative (see Figure 2.2-9 of the DEIR/Technical Appendix), the I-380 Least-Cost Design Option, and Alternatives IV and V.

The cumulative noise impact analysis for the DEIR/SDEIS included the noise from traffic on these proposed ramps, but with no noise shielding of ramp traffic. The standard design for highway ramps would normally include a 3- to 4-foot-high safety barrier along the edge of the roadway. When the noise shielding provided by a safety barrier is included in the analysis, there would be no significant noise impact indicated for the six to ten homes on Madrone and Spruce Streets in Millbrae.

The existing discussion of Mitigation Measure 6.1 on page 3.9-26 of the DEIR/Technical Appendix, is deleted and replaced as follows:

Implementation of standard 3- to 4-foot-high concrete safety barriers along the edges of the highway ramps would reduce the cumulative noise impact to the six to ten homes on Madrone and Spruce Streets to a level that would be less than significant for combined noise from BART trains, freeway ramp traffic, and general traffic increases in the area.

However, it is Caltrans' standard policy to "consider" traffic noise abatement whenever a new roadway or substantial change to an existing roadway is proposed that would result in the noise level at residences approaching or exceeding a peak hour  $L_{eq}$  (energy equivalent level) of 67 dBA. Based on information available at the time, the analysis for the DEIR/SDEIS indicates that standard concrete safety barriers along the proposed ramp will be sufficiently low so that additional noise abatement measures would not be required, Caltrans would explore this in a more detailed analysis during preliminary engineering for the project.

The commentator is correct in stating that the minimum height traffic noise abatement barrier considered by Caltrans is 6 feet. However, Caltrans, in its Highway Design Manual, Chapter 1100, *Highway Traffic Noise Abatement*, may determine that the projected noise levels for the six to ten homes do not warrant a traffic noise barrier based on the criteria stated above. Other reasons considered by Caltrans that could preclude implementation of a traffic noise barrier are requirement of a minimum 5dBA reduction and the cost of a traffic noise barrier weighed against the expected benefit.

6.18. Normal procedure is to have the State Historical Preservation Officer's (SHPO) concurrence on the eligibility of historic and archaeological properties before the DEIS/DEIR is written; SHPO concurrence would preclude the discussion of whether something is potentially eligible or not.

**Response.** State Historical Preservation Officer (SHPO) concurrence on the eligibility of historic and archaeological properties in the northern portion of the proposed extension (between Colma and San Bruno) was sought and received. As reflected in a letter contained in Volume V, Technical Appendices to the FEIR/FEIS, SHPO has indicated which of the historic properties identified in the DEIR/SDEIS are either listed on or eligible for the National Register of Historic Places.

6.19. According to the National Register nomination form, the existing Millbrae CalTrain Station dates to 1907; it replaced an earlier station built in the 1860s. The description of the station on pages 3.4-6 and 3.4-7 and page 5-21 [of the Summary DEIR/SDEIS] should be corrected. Are there any other features, such as outbuildings or landscaping that contribute to the significance of the

property? What is the boundary of the eligible property, if it is different from the Assessor's parcel?

**Response.** Text of the DEIR/Technical Appendix is modified to clarify that the original 1860s era station burned in 1890 and that the current structure dates to 1907. There are no outbuildings or other features that contribute to the significance of this property. The nominated property is within a 62-foot by 94-foot rectangle of land that surrounds the structure. On page 3.4-14 of the DEIR/Technical Appendix, the first complete sentence is replaced by the following:

The original 1860s era station burned in 1890 and the current structure dates to 1907. It is a two-story, wood frame clapboard structure with colonnade on track side. There are no outbuildings or other features that contribute to the significance of this property. The property is within a 62 foot by 94 foot rectangle of land, which surrounds the structure.

On page 5-24 of the DEIR/Technical Appendix, the first complete sentence is revised as follows:

It dates to the ~~1860s 1907~~ and is currently owned by Caltrans, although it is operated by the Peninsula Joint Powers Board (JPB) under a licensing agreement with Caltrans.

Please refer to Response 6.23 for additional information on the Millbrae Caltrans Station.

- 6.20. It is highly unlikely that the United Airlines Hangar (page 3.4-7 [of the Summary DEIR/SDEIS]) is eligible for the National Register since it is not of extraordinary, national significance (the usual example of a resource which bypasses the 50-year rule is Cape Canaveral). The hangar is unlikely to be determined eligible before the year 2005.

**Response.** Because the United Airlines Hangar is outside the Area of Potential Effects (APE), all references to this structure have been eliminated.

Page 3.4-11, paragraph three, sentence one, is revised as follows:

A description of the Millbrae Train Station, as well as ~~five~~ ~~six~~ other properties potentially eligible for the NHRP.

Page 3.4-14 and Figure 3.4-3 on page 3.14-12 of the DEIR/Technical Appendix are revised to delete the paragraph and callout on the figure, respectively, describing the United Airlines Hangar.

Page 3.4-31 of the DEIR/Technical Appendix, paragraph four, sentence two is revised as follows.

The cultural resource impacts of this option are the same as those described for Alternative V, except that the alignment would not be near the potentially historic properties at 540 San Antonio and the pump house, ~~but would be proximate to the United Airlines Hangar as described below and therefore there would be no impact as a result of implementation of Design Option V-A.~~

Pages 3.4-31 and 3.4-32 of the DEIR/Technical Appendix, Impact 1, beginning bottom of page 3.4-31: delete impact and following paragraph.

*1. Design Option V-A in an aerial configuration would introduce a new visual element into the setting of the United Airlines Hangar, a property potentially eligible for the National Register. However, this change would not be out of character with the surroundings. (1)*

The aerial configuration of Design Option V-A would traverse SFIA property north and east of the United Airlines Hangar. The BART guideway would be approximately 50 feet above the ground as it approaches the new Airport GTC Station. This segment of Design Option V-A would introduce a new visual element into the setting of the United Airlines Hangar and visually and physically separate this structure from other nearby air freight uses. This change, however, is not expected to adversely affect the setting in part because the setting is visually defined by the upper deck roadway around the terminals as well as the viaduct connecting the SFIA to I-380. Thus, the aerial BART alignment would not be out of character with these existing elements of the setting. The setting is further defined by the airport and its operations, and the introduction of an aerial BART alignment would not alter this relationship, as the building would still be physically connected to other air freight activities.

Page 3.4-34 of the DEIR/Technical Appendix, first sentence of second paragraph under Impact 8 is revised as follows:

~~Five~~ Six buildings adjacent to the right-of-way are potentially eligible for inclusion on the National Register: 757 Huntington Avenue, San Bruno (the American Legion Post); 601-605 and 609-617 San Mateo Avenue, San Bruno (early commercial buildings in downtown San Bruno); 540 San Antonio Avenue, San Bruno (a Craftsman-style house); and 1000 El Camino Real, Millbrae (the San Francisco Water Department pump house); ~~and the United Airlines Hangar.~~

- 6.21. Has the plan for temporary relocation of the Colma Railroad Station, an eligible property, been cleared under a previous environmental document? Any alteration of this eligible structure should be done in consultation with the SHPO and according to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1990).

**Response.** The Colma Railroad Station was first moved in 1983 during prior BART construction, then returned to its original location in 1989. This temporary relocation was undertaken as part of an MOA among BART, SHPO, and the Urban Mass Transit Authority (UMTA). The Station was temporarily moved again in 1993 to facilitate Colma BART Station construction activities; it is still at this temporary location. BART is preparing a draft MOA and Finding of Effect (FOE) document to establish conditions for the relocation of this building to an appropriate permanent location and to transfer title to the Town of Colma. Expected signatories to this MOA include BART, Town of Colma, FTA, SHPO, and the Advisory Council on Historic Preservation.

Text of the DEIR/Technical Appendix is modified to clarify the status of the Colma Railroad Station. Page 3.4-11, paragraph one, sentence five is revised as shown below:

The Old Colma Railroad Station will be removed from its temporary storage location in the project APE and ~~would not be affected by development of any BART build alternative will be deeded to the Town of Colma and relocated (under the terms of an MOA currently being prepared).~~

- 6.22. Table 3.4-1, page 3.4-9 [of the Summary DEIR/SDEIS], the impact to historic properties have not been adequately evaluated in compliance with Section 106 of the National Historic Preservation Act. The specific terminology under Section 106, Effect, No Effect or Adverse Effect, should be used.

**Response.** As indicated under "Significance Criteria and Methodology" on page 3.4-14 of the DEIR/Technical Appendix, the criteria used to determine the significance of impacts on cultural resources are consistent with the federal Section 106 criteria of effect on historic properties. An Historic Architectural Survey Report (HASR) of the area south of I-380 was completed in August 1995 and amended in February 1996 to include additional areas. Based on the findings of this and earlier surveys, an Historic Property Survey Report (HPSR) and Finding of Effect (FOE)

document for the Aerial Design Option LPA were submitted to SHPO as part of the preparation of this FEIR/FEIS. Section 3.4 of Volume I of this FEIR/FEIS reflects SHPO's review of these materials, concluding that the Aerial Design Option LPA would have no adverse effect on any National Register of Historic Places (NRHP)-listed properties along the entire route, with the exception of the arched cut-stone bridge in South Francisco.

- 6.23. In addition, the impacts to historical properties are not addressed in compliance with CEQA and the California Register. AB 2882 amended CEQA (PRC 21084.1) to read "A project that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment."

**Response.** Impacts to historic properties are evaluated pursuant to CEQA in the DEIR/SDEIS. Page 3.4-14 of the DEIR/Technical Appendix specifies the criteria used to determine the significance of effects on cultural resources. According to these criteria, a project would have a significant impact on a historic resource if it directly physically disrupted or adversely affected the resource or if it diminished the integrity of the resource's location, design, historic setting, materials, workmanship, feeling, or association. Such significance criteria are consistent with and, in fact, are more comprehensive than the criterion cited by the commentor.

- 6.24. Alternative VI would cause the Millbrae CalTrain Station to be relocated, resulting in an adverse effect causing "physical destruction or alteration of all or part of this property." Will the use of the station remain the same, or will it be abandoned as a station? Will the character of the property's setting be changed (if that character contributes to the property's National register eligibility)? Please clarify.

**Response.** Based on additional engineering performed for this segment, BART has determined that the Millbrae Railroad Station would not need to be relocated for the Aerial Design Option LPA. The National Register of Historic Places Inventory Nomination Form for this property indicates that its setting is not a contributing element in its National Register status and the property consists only of the building on a small plot (62 by 94 feet in size). In any case, the urban- and transportation-related setting of the property will not be significantly altered.

Text of the DEIR/Technical Appendix is revised to clarify the analysis of the setting of the property. On page 3.4-34, paragraph three, add the following after sentence two:

The National Register of Historic Places Inventory Nomination Form for this property indicates that its setting is not a contributing element in its National Register status and the property consists only of the building on a small (62 by 94 feet) plot. In any case, the urban- and transportation-related setting of the property would not be significantly altered.

Text of the DEIR/Technical Appendix is modified to address impacts pursuant to CEQA criteria. Page 3.4-34 paragraph three, is revised as follows:

Based on additional engineering performed in this segment the The Millbrae Railroad Station would not need to be relocated would be moved 15 feet west of its present location to accommodate the BART and CalTrain tracks. The building is on the National Register, and its relocation of the platform to the Millbrae BART Station would not be considered affected a significantly nor would it be impacted pursuant to Section 106 and CEQA (Appendices G and K) criteria.

Page 5-24 of the DEIR/Technical Appendix, paragraph one, sentence two is likewise revised:

The train station would not be moved approximately 15 feet west of its present location to accommodate the BART railtracks but the station platform would be shifted 650 feet

northward to the Millbrae Avenue BART Station. This would result in the south end of the platform being located approximately 100 feet north of the station.

Page 5-24 of the Summary DEIR/SDEIS, paragraph two, is deleted and replaced with the following:

No mitigation is needed for this site, as it will not be relocated.

- 6.25. Figure 5-10 (in the Section 4(f) evaluation) should show the existing and proposed new locations of the station and any contributing elements with the proposed project in greater detail, and the illustration should be presented in Section 4.2.

**Response.** As noted in Response 6.24, the Millbrae CalTrain Station building would not be moved but the CalTrain platform would be shifted north to the BART/CalTrain Station. The Section 4(f) evaluation in Chapter 5, Volume I of this FEIR/FEIS contains new maps showing the existing location of the station in greater detail.

- 6.26. More detailed exhibits and descriptive information showing the boundary and contributing elements of each eligible property, contrasted with the proposed new right-of-way (ROW) or temporary easement is required.

**Response.** For more detailed exhibits and descriptive information showing boundaries and contributing elements of each eligible property, contrasted with the proposed right-of-way (ROW) and Area of Potential Effects (APE), please refer to the following reports: *Historic Architectural Survey Report, BART-SFO Extension Project* by Laurence H. Shoup and Mark Brack with Nancy Fee and Bruno Giberti (November 1993), *A Historic Resources Evaluation Report of Seven Colma Cemeteries, Colma, California* by Laurence H. Shoup and Mark Brack with Nancy Fee and Bruno Giberti (November 1993), and *Historic Architectural Survey Technical Report Volume II: Alternative VI, Highway 380 to Trousdale Drive in Burlingame* by Laurence H. Shoup and Ward Hill (August 1995). As noted on page 3.4-1 footnote 1 of the DEIR/Technical Appendix, these reports are available for examination at the BART offices, 1000 Broadway, Oakland, California. Additional studies, including a third *Historic Architectural Survey Report* and a Findings of Effect, have been performed as part of this FEIR/FEIS.

- 6.27. Illustrations of the existing condition and a simulation with the project should show whether a sound wall, retained cut, or elevated structure would be a visual effect directly on the resource itself, or on the resource's setting. Illustrations should include more detail than those presented in the 4(f) chapter.

**Response.** The level of graphic detail in Chapter 5, Section 4(f) Evaluation, is consistent with federal requirements and is intended to provide information in an accessible format. For additional details, the commentor may wish to review supporting documentation available from BART. Please refer also to Response 6.26 regarding additional exhibits and descriptive information.

- 6.28. The Memorandum of Agreement (MOA) should be in the final environmental document. Caltrans or the Peninsula Corridor Joint Powers Board should probably be a signatory to the MOA. This agreement should include a stipulation that BART will ensure that, within 90 days after the relocation of the Millbrae CalTrain Station and any other contributing elements, the historic property should be re-evaluated by a qualified cultural resources specialist.

**Response.** The MOA(s) are presented in this final environmental document (see Volume V of this FEIR/FEIS). As stated in Response 1.2, responsible agencies and their responsibilities for implementation of mitigation measures will be signatories to each MOA.

Please refer to Response 6.24 for additional information on the Millbrae CalTrain Station.

- 6.29. Section 4.3, in the [DEIR/Technical Appendix, page 3.4-15, item 2.1, we concur with the language stated. However, if any archaeological resources are discovered during construction, the contractor shall immediately notify the Resident Engineer and work shall be halted in the area of the find until an evaluation of the find is made by Caltrans' Environmental Branch Archaeologist.

**Response.** Please refer to Response 16.3 for a revised Mitigation Measure 2.1.

A qualified archaeologist would be contacted to make the appropriate evaluation per SHPO requirements. BART would confer with SHPO, as to determine if another state agency would be appropriate for coordination.

- 6.30. Pages 3.7-3, 3.7-4, and 3.7-11 [of the Summary DEIR/SDEIS]. There is no indication that the Section 7 consultation process (species of concern) or the integrated NEPA/404 process (wetlands) has been initiated...on the San Francisco Garter Snake, on the California red-legged frog, and on wetlands, both processes will be required if the environmental document is approved by the Federal Transit Administration (FTA) or by the Federal Highway Administration (FHWA).

**Response.** Both the Section 7 consultation process and the integrated NEPA Section 404 process have been addressed in the environmental documentation. BART has been working closely with all the agencies that signed the NEPA 404 MOU. Please refer to Responses 3.1 and 3.2 for further details on these ongoing processes. Please also refer to Response 3.2 for discussion of Section 7 consultation and the Section 404 application.

- 6.31. The document does not adequately address mitigation of impacts associated with construction of the Hickey Station within the Colma Creek floodplain...BART's proposed drainage for the Hickey Street Station could not pass anticipated fifty year flow, and it is not compatible with the current plans to improve drainage along Colma Creek.

**Response.** The improvement plans for Colma Creek have been revised in accordance with comments received. Details of the plan are described in Response 15.4.

- 6.32. The respective Tables 3.1-72, 3.1-74, and 3.1-76 indicate significant direct impacts and significant cumulative traffic impacts on US 101 for all Non-TSM Build Alternatives....We suggest mitigation measures for parking facilities be substantially reduced in size, in combination with the provision of additional SamTrans feeder service and imposition of parking fees.

**Response.** MTC's mode choice model determined the mode of access to the proposed BART extension stations. Transit service, including SamTrans buses was increased to ensure that supply was not a constraint to potential demand. If parking were to be decreased, then other significant impacts, such as spillover parking and other disruptions to the local communities, would require mitigation that would lead to increasing the parking supply.

- 6.33. A Caltrans' Encroachment Permit will be required for any work done within the State right-of-way.

**Response.** In order to acknowledge that a Caltrans Encroachment Permit is required for any work done within a State right-of-way, page 1-10, Department of Transportation line of Table 1-3 in the DEIR/Technical Appendix under State Agencies is revised as follows:

Possible encroachment of federal and state funded highways requiring the use of a Caltrans Encroachment Permit.

## **7. GOVERNOR'S OFFICE OF PLANNING AND RESEARCH**

- 7.1. The enclosed comments on your draft environmental documents were received by the State Clearinghouse after the end of the state review period....Lead agencies are not required to respond to late comments. However, you may wish to incorporate these additional comments into the preparation of your final environmental document.

**Response.** BART and SamTrans have acknowledged these comment letters, including late ones, and responses have been prepared.

## **8. CALIFORNIA STATE PUBLIC UTILITIES COMMISSION**

- 8.1. While your DEIR/SDEIS specifies that two 34.5kV lines may be required under some of the alternatives, it doesn't describe the low side of the voltage or the site of the proposed Shaw Road substation.

**Response.** The proposed new substation at Shaw Road is one of three possible sources of PG&E power for the BART extension as described on page 2-20 of the DEIR/Technical Appendix. The site for the proposed substation is shown in Figure 5, page 145 of the Design Appendix. The substation would be composed of power transformers and associated switching equipment to convert 115 kV power (high-voltage side) from one of the six adjacent PG&E 115 kV circuits to 34.5 kV (low-voltage side). The 34.5 kV power would then be transmitted from the Shaw Road substation to one of the BART traction power substations within the BART alignment via an underground 34.5 kV line routed through city streets as shown in Figure 5, page 145 in the Design Appendix. The receiving traction power substation would distribute the 34.5 kV power to all the other traction power substations in the extension through two underground 34.5 kV lines running along the alignment. At each traction power substation, the 34.5 kV ac power would be converted to 1000 V dc which is applied to the third rail to power the BART trains.

- 8.2. In order for the CPUC to make an independent assessment of whether PG&E will be required to obtain CPUC authority to build the required facilities, these facilities must be adequately defined in the EIR/SEIS and any significant environmental impacts attributed to PG&E's portion of the BART-SFIA identified.

**Response.** Three PG&E substations are identified in the DEIR/SDEIS as potential sources for electrical power for the BART extension. These facilities, including the existing Airport Main Substation, the existing Millbrae Substation, and a new substation to be constructed on Shaw Road at Highway 101, are described on page 2-20. No new impacts are expected to occur if BART ties into either of the two existing substations; the potential for EMF impacts associated with construction of the new substation at Shaw Road is discussed in Section 3.11, Public Health. Land use compatibility, visual, and noise impacts are not projected because the Shaw Road area is located in an existing industrial area of South San Francisco. The proposed site is not located in an environmentally sensitive area, so that cultural, geologic, and hydrologic impacts are not expected. The substation would not be staffed, and, as a result, no traffic impacts would be expected to occur. Finally, there are no emissions associated with the facility so that localized and regional air quality would not be adversely affected.

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### **3.3 LOCAL AGENCIES**

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## **9. ALAMEDA-CONTRA COSTA TRANSIT DISTRICT**

- 9.1. The bus terminal, CalTrain extension destination, and airport rail service projects are tightly interlinked due to funding and operational factors, and should be analyzed simultaneously rather than in isolation from each other.

**Response.** The CalTrain extension to downtown San Francisco, including an alternative of terminating at the Transbay Terminal, is the topic of other studies. The extension of CalTrain to downtown San Francisco and upgrades including electrification were recently analyzed in the CalTrain San Francisco Downtown Extension/System Upgrades Final Report (March 1994). At the conclusion of that study, the Peninsula Corridor Joint Powers Board selected Alternative 8B - Surface/Subway to Market and Beale with electrification of CalTrain as the Locally Preferred Alternative for the purpose of advancing the CalTrain Extension/System Upgrade into preliminary engineering. The Joint Powers Board also designated Alternative 3B - Transbay [bus] Terminal to be included for preliminary conceptual engineering/environmental analysis in the upcoming EIS. This LPA, the Transbay Terminal alternative, and other CalTrain alternatives are presently under study in the CalTrain San Francisco Downtown Extension Project Draft Environmental Impact Statement/Report.

In addition, the commentor is referred to Response 11.6 for a discussion of the differences in patronage on the BART extension assuming the extension of CalTrain to downtown San Francisco.

The 1992 LPA, Alternatives III, IV, V, VI and their design options include an intermodal connection between the ALRS and CalTrain and/or BART. The impacts of the ALRS west of Highway 101 is fully evaluated in the DEIR/Technical Appendix.

## 10. CITY/COUNTY ASSOCIATION OF GOVERNMENTS OF SAN MATEO COUNTY

- 10.1. The CCAG Board...voted to recommend that SamTrans not move ahead until they assure the financial viability of the bus system in San Mateo County and CalTrain.

**Response.** On April 28, 1995, the SamTrans Board of Directors approved Resolution 1995-45 adopting Alternative VI as the Locally Preferred Alternative (LPA) for the BART-San Francisco Airport Extension. The SamTrans Board took this action in conjunction with a financial plan that enables SamTrans to continue financial support of its various transportation programs, specifically CalTrain, Motor Bus, and Paratransit/ADA services.

The plan, which is fully described in and is an integral part of SamTrans's FY 1995/96 to FY 2004/05 Short Range Transit Plan.

The plan also required various actions which include adjustments in the level of motor bus subsidy and amendment of the BART-SamTrans Comprehensive Agreement of 1990. The major elements of the plan are:

1. BART project costs will be paid from unrestricted reserves and from savings from elimination of duplicate and inefficient motor bus services.
  - a. Use of \$110 million in unrestricted reserves toward the near-term contribution of \$4,185 million.
  - b. Issuance of an estimated \$75 million in bonds to provide the balance of the required \$185 million.
  - c. Identification of bus system modifications to eliminate redundant and inefficient services through the Comprehensive Route Renovation Study.
2. Revision of the BART-SamTrans Comprehensive Agreement to change SamTrans participation in project costs.
  - a. Reduction of the near-term payment to BART from \$330 to \$185 million.
  - b. An absolute cap on SamTrans contribution to project construction costs.
  - c. The remaining \$145 million payment to BART to be made from net operating revenues and fare surcharges once the extension begins operation.

BART and SamTrans are currently negotiating the above proposed revisions to the existing BART-SamTrans Comprehensive Agreement.

- 10.2. We...ask that you extend the NEPA required comment period on the final EIS by 15 days (45 days total), to allow sufficient time to review the document and the adequacy of the response to our concerns.

**Response.** The public review period for the DEIR/SDEIS was extended and, in fact, covered a 60-day period beginning January 13, 1995.

- 10.3. The "Existing" conditions reported by the previous studies were based on 1991 traffic counts, which frequently resulted in worse conditions than Existing conditions reported by BART using 1993 traffic counts. What happened between 1991 and 1993 that would cause conditions to improve so noticeably?

**Response.** The techniques used to analyze traffic at the intersections differed. The methodology used in the DEIR/SDEIS to analyze the level of service at local intersections is the same as the methodology used and approved by the San Mateo County Transportation Authority in their Congestion Management Plan.

- 10.4. The SFIA EIR projected conditions to be significantly worse at several CMP intersections, and along U.S. 101 to the south and north of SFIA - even with the BART extension...How could future conditions reported for the same facilities be so different (e.g. U.S. 101 north of SFIA, Millbrae Avenue)?

**Response.** The subarea model used in the DEIR/SDEIS to forecast volumes on roadways in the study area was calibrated against field traffic counts of the intersections being studied. In other words, the analysis compared current, forecasted conditions against local conditions as obtained from these field counts. The DEIR/SDEIS used more sophisticated forecasting methods of analyzing impacts from the BART extension than those used in the SFIA Master Plan; the impacts of the BART extension to freeway volumes were based on the approved regional model that includes a detailed mode choice model. In contrast, the SFIA Master Plan EIR did not use MTC's regional travel demand model for assessing the impacts of the BART extension.

- 10.5. The BART traffic analysis develops future "background" traffic volumes by applying an ABAG-generated growth factor in a uniform manner throughout the study area. It does not consider any localized impacts due to trips generated by specific development projects (except for the SFIA Master Plan)....BART should consult local officials to determine the location of significant planned/approval development projects, and incorporate that data into the T2 traffic model they used to assess local street impacts.

**Response.** The increase in population and employment as forecast by ABAG did not produce a uniform growth factor applied to all traffic analysis zones in the study area. ABAG's forecast of growth in the study area was based on many factors, including the general plans as developed by the local communities. Growth in each traffic analysis zone differs according to the type of households and employment. MTC's travel demand model includes approved projects as that information is incorporated into the ABAG forecasts. Furthermore, local jurisdictions were consulted at the outset of the project to identify significant development projects. Inquiries were made specifically to learn of projects that may not have been acknowledged by ABAG forecasts. Based on these conversations and subsequent discussion with ABAG, the only adjustment made to ABAG forecasts was for employment growth at SFIA.

- 10.6. At several locations, volumes in the peak direction flow in the opposite direction of what one would expect (i.e. away from a station during the A.M. peak hour). These situations are counter intuitive, and occur at intersections near each Alternative VI station site.

**Response.** Please refer to Responses 17.15, 17.17, 19.31, and 19.32 for a discussion of traffic flow in the vicinity of BART stations under Alternative VI.

- 10.7. There are several cases in which traffic volumes that depart specific intersections do not match or "balance" the traffic volumes approaching adjacent intersections:...Southbound El Camino Real between Sneath Lane and the I-380 WB Off-ramp;...Northbound I-280 ramp roadway between San Bruno Avenue and Sneath Lane;...Northbound El Camino Real between the I-380 Eastbound and Westbound Off ramps;...Huntington Avenue between San Mateo Avenue and San Bruno Avenue;...San Mateo Avenue between San Bruno Avenue and Huntington Avenue.

**Response.** The reason that traffic volumes do not balance at the pairs of intersections listed is that other intersections exist between the pairs provided in the comment except in one case, as explained below. Traffic that uses the entrances to two shopping centers, Tanforan Park and Towne Center, accounts for the difference on Sneath Lane between El Camino Real and Huntington Avenue. Similarly, the westbound on-ramp to I-380 is located on southbound El Camino Real between Sneath Lane and the westbound off-ramp to I-380; an additional northbound on-ramp to I-280 is located between San Bruno Avenue and Sneath Lane; the westbound loop on-ramp to I-380 is located on northbound El Camino Real between the eastbound diagonal ramp to I-380 and the westbound diagonal off-ramp for I-380; and First Avenue intersects with San Mateo Avenue between San Bruno Avenue and Huntington Avenue.

To estimate the intersection levels of service in the study area, the assignment results from the sub-area traffic model were hand adjusted to smooth the traffic numbers. The A.M. peak hour northbound traffic at the San Mateo/Huntington intersection was inadvertently assigned to Huntington Avenue rather than to San Mateo Avenue under Alternative VI. When corrected, the added northbound traffic on San Mateo Avenue improves the intersection level of service because approximately 250 vehicles change from a left-turn movement to a through movement. Also, this change brings the traffic volumes on Huntington Avenue between San Mateo and San Bruno Avenues into balance. Given this correction, the level of service changes at the Huntington/San Mateo intersection from LOS D, as originally calculated, to LOS C under Alternative VI and the Aerial Design Option LPA during the A.M. peak hour in 2010. The level of service at this intersection remains at LOS C during the A.M. peak hour in analysis years 1993 and 1998, as originally estimated. This revised level of service at the Huntington/San Mateo intersection in the year 2010 changes the LOS for Appendix Tables C-13, Intersection Level of Service -2010, and C-24, Alternative VI Intersection Level of Service.

- 10.8. We note that the lane configurations and signal phasing assumptions at some intersections were not input correctly. These inconsistencies may have affected the level of service (LOS) calculations...[i.e. at] El Camino Real/San Bruno Avenue, San Bruno/Huntington, Sneath/I-280 in San Bruno.

**Response.** The lane configurations used in the calculations of intersection level of services at these three intersections were based on discussions with staff of the City of San Bruno. The improvements assumed at the intersection of El Camino Real/San Bruno are to be completed by 1996, before completion of the BART extension, according to these discussions. The calculation sheet for the intersection of Huntington/San Bruno indicates a single through lane for Huntington which actually includes through, left and right turning traffic but this indication is simply how single lanes are drawn by the software program used to calculate the level of service. The same explanation applies to the single lane shown for the I-280 off-ramp at the intersection with Sneath Lane.

- 10.9. The ridership and parking calculations shown in DEIR Appendix Table B-40 do not include any trips by air passengers.

**Response.** Trips by air passengers are included in Table B-40, Alternative VI BART Station Entries and Exits, although not by auto access. Please refer to Response 10.10 for a discussion of why air passengers are not included in parking calculations.

- 10.10. Without effective mitigation measures and enforcement, ridership to SFIA would affect traffic conditions near stations and parking demand at them. Hence, BART must reflect ridership and parking demand related to air passengers at Extension stations....The mitigation measure proposed is a ticketing/validation system which limits commuter parking to a 24-hour period...[and] will only affect riders who would leave cars overnight.

**Response.** Preventing overnight parking at BART stations along the BART extension would virtually eliminate air passenger parking. Such a measure would not affect the transit patronage estimated using MTC's travel demand model. Air passengers who leave and return on the same day are overwhelmingly business travelers who are time-sensitive rather than cost-sensitive. The cost savings of parking at BART would not be adequately compensated by the travel time difference of parking at the airport or at a satellite parking facility. The market for one-day air passengers who travel on personal business where cost savings outweigh time savings is a very small number of people and would be accommodated by the surplus of parking spaces supplied beyond the spaces predicted by BART's modeling effort.

It should be noted that FTA does not allow its funds to be used to provide for air passenger parking at its transit stations. Overnight parking will not be allowed at the stations along the BART extension. The DEIR/SDEIS has identified the potential for the one-day air passenger to park at certain BART stations rather than park in airport lots. To prevent airport passengers parking at BART stations, Mitigation Measures 6.1 and 6.2 on page 3.1-169 of the DEIR/Technical Appendix would establish a monitoring program and certain parking restrictions, pricing surcharges, and other administrative mechanisms if the displacement of BART and CalTrain parking patrons prove to be a problem at BART stations.

A surcharge between the BART extension stations in South San Francisco, San Bruno and Millbrae would be considered only as a last option. Mechanisms that specifically link this surcharge only to those who park at one of the BART extension stations and then take BART to the airport would be thoroughly investigated because the intent of these mechanisms is not to penalize patrons who walk, use transit, or are dropped off at one of these BART extension stations.

- 10.11. There appears to be no credible plan to limit air passenger park/ride activity at BART stations, and it is highly inappropriate for the DEIR to assume that there is one. The issue cannot be ignored, and the traffic and parking demand forecasts must reflect these additional trips and parking demand. Without them, the Transportation analysis is incomplete.

**Response.** Please refer to Response 10.10 for a discussion of air passenger parking at BART stations along the BART extension.

- 10.12. The auto access and total BART ridership numbers for Hickey and Tanforan Stations shown in Table B-40 of the Technical Appendix are inaccurate. For Hickey station, daily "auto-access" ridership increases by 116 percent from 1,464 to 3,163. Total daily station ridership increases from 6,266 to 7,965. For Tanforan, daily "auto-access" ridership increases by 68 percent from 1,295 to 2,176. Total daily station ridership increases from 8,934 to 9,815.

**Response.** The comment is correct; there were transcription errors in Table B-40. A revised version is presented on the following pages. The numbers stated in Table B-40, as appeared in the DEIR/Technical Appendix for auto access to the Hickey and Tanforan Stations, were smaller than the correct volumes, while the number for auto access at the Millbrae Avenue Station was greater than the correct volume in all three analysis years. Also, the total number of walk trips under the "productions" columns at the Airport International Terminal Station was omitted in the three analysis years in the original Table B-40.

**Table B-40**  
**Alternative VI - Millbrae Avenue via Airport International Terminal**  
**BART Station Entries and Exits (I)**  
**Daily Volumes by Access Mode and Trip Purpose**

	1993 (Base Year) Productions		1998 (Year of Opening) Productions		2010 (Horizon Year) Productions	
	Attractions		Attractions		Attractions	
<b>Daly City BART Station</b>						
Home-Based Work						
Walk	936	180	985	195	1,029	213
Auto	4,761	—	5,007	—	5,232	—
Transit	2,096	584	2,204	634	2,303	693
TOTAL	7,793	764	8,196	829	8,564	906
Non-Work						
Walk	444	113	467	123	488	134
Auto	980	—	1,031	—	1,077	—
Transit	980	534	1,031	580	1,077	634
TOTAL	2,404	647	2,528	703	2,642	768
Air Passengers						
Walk	13	13	15	15	19	19
Auto	68	68	80	80	99	99
Transit	75	75	87	87	108	108
TOTAL	156	156	183	183	226	226
TOTAL	1,394	306	1,467	333	1,536	366
Auto	5,810	68	6,118	80	6,408	99
Transit	3,150	1,193	3,322	1,302	3,488	1,435
TOTAL	10,353	1,567	10,907	1,715	11,432	1,900
<b>Colma BART Station</b>						
Home-Based Work						
Walk	1,084	196	1,140	212	1,191	232
Auto	5,170	—	5,437	—	5,681	—
Transit	5,328	455	5,603	494	5,855	540
TOTAL	11,582	651	12,180	706	12,727	772
Non-Work						
Walk	376	93	395	101	413	110
Auto	748	—	787	—	822	—
Transit	748	441	787	479	822	523
TOTAL	1,872	534	1,969	579	2,057	633
Air Passengers						
Walk	—	—	—	—	—	—
Auto	—	—	—	—	—	—
Transit	6	6	6	6	8	8
TOTAL	6	6	6	6	8	8
TOTAL	1,460	288	1,535	313	1,604	342
Auto	5,918	—	6,223	—	6,503	—
Transit	6,082	902	6,396	979	6,685	1,071
TOTAL	13,459	1,190	14,155	1,292	14,792	1,413

Source: MTC, BART-SFO AA/DEIR Patronage Forecasts, May 1991  
MTC, BART-SFO SDEIS/DEIR Patronage Forecasts, October 1993  
Parsons Brinckerhoff, December 1993

(1) "Production and Attraction" format used. Productions are those trips where the station is at the home end of the trip. Attractions are those trips where the station is at the destination end of the trip.

**Table B-40 (cont'd)**  
**Alternative VI - Millbrae Avenue via Airport International Terminal**  
**BART Station Entries and Exits (1)**  
**Daily Volumes by Access Mode and Trip Purpose**

	1993 (Base Year)		1998 (Year of Opening)		2010 (Horizon Year)	
	Productions	Attractions	Productions	Attractions	Productions	Attractions
<b>Hickey BART Station</b>						
Home-Based Work						
Walk	1,660	126	1,746	137	1,824	150
Auto	2,878	—	3,027	—	3,163	—
Transit	301	489	317	531	331	580
TOTAL	4,839	615	5,089	668	5,318	730
Non-Work						
Walk	527	195	554	211	579	231
Auto	348	—	366	—	382	—
Transit	349	268	367	291	383	318
TOTAL	1,223	463	1,286	502	1,344	549
Air Passengers						
Walk	—	—	—	—	—	—
Auto	—	—	—	—	—	—
Transit	8	8	10	10	12	12
TOTAL	8	8	10	10	12	12
TOTAL						
Walk	2,187	321	2,300	349	2,403	381
Auto	3,226	—	3,393	—	3,545	—
Transit	658	765	693	831	726	910
TOTAL	6,071	1,086	6,385	1,180	6,674	1,291

	1993 (Base Year)		1998 (Year of Opening)		2010 (Horizon Year)	
	Productions	Attractions	Productions	Attractions	Productions	Attractions
<b>Tanforan BART Station</b>						
Home-Based Work						
Walk	72	375	76	407	79	445
Auto	1,980	—	2,082	—	2,176	—
Transit	151	4,348	159	4,720	166	5,158
TOTAL	2,203	4,723	2,317	5,127	2,421	5,603
Non-Work						
Walk	66	385	69	418	72	457
Auto	302	—	318	—	332	—
Transit	302	494	318	536	332	586
TOTAL	670	879	704	954	736	1,043
Air Passengers						
Walk	—	—	—	—	—	—
Auto	—	—	—	—	—	—
Transit	4	4	5	5	6	6
TOTAL	4	4	5	5	6	6
TOTAL						
Walk	137	760	145	825	151	902
Auto	2,282	—	2,400	—	2,508	—
Transit	457	4,846	481	5,261	504	5,750
TOTAL	2,877	5,607	3,026	6,086	3,163	6,652

Source: MTC, BART-SFO AA/DEIR Patronage Forecasts, May 1991  
MTC, BART-SFO SDEIS/DEIR Patronage Forecasts, October 1993  
Parsons Brinckerhoff, December 1993

(1) "Production and Attraction" format used. Productions are those trips where the station is at the home end of the trip. Attractions are those trips where the station is at the destination end of the trip.

**Table B-40 (cont'd)**  
**Alternative VI - Millbrae Avenue via Airport International Terminal**  
**BART Station Entries and Exits (1)**  
**Daily Volumes by Access Mode and Trip Purpose**

	1993 (Base Year)		1998 (Year of Opening)		2010 (Horizon Year)	
	Productions	Attractions	Productions	Attractions	Productions	Attractions
<b>Airport International Terminal BART Station</b>						
Home-Based Work						
Walk	—	1,517	—	1,646	—	1,799
Auto	—	—	—	—	—	—
Transit	28	2,194	30	2,382	31	2,603
<b>TOTAL</b>	<b>28</b>	<b>3,711</b>	<b>30</b>	<b>4,028</b>	<b>31</b>	<b>4,402</b>
Non-Work						
Walk	—	1,086	—	1,179	—	1,288
Auto	—	—	—	—	—	—
Transit	196	1,572	206	1,706	215	1,865
<b>TOTAL</b>	<b>196</b>	<b>2,658</b>	<b>206</b>	<b>2,885</b>	<b>215</b>	<b>3,153</b>
Air Passengers						
Walk	3,004	3,004	3,527	3,527	4,354	4,354
Auto	—	—	—	—	—	—
Transit	756	756	888	888	1,096	1,096
<b>TOTAL</b>	<b>3,761</b>	<b>3,761</b>	<b>4,415</b>	<b>4,415</b>	<b>5,450</b>	<b>5,450</b>
<b>TOTAL</b>						
Walk	3,004	5,607	3,527	6,351	4,354	7,441
Auto	—	—	—	—	—	—
Transit	980	4,523	1,123	4,976	1,342	5,564
<b>TOTAL</b>	<b>3,984</b>	<b>10,129</b>	<b>4,650</b>	<b>11,327</b>	<b>5,696</b>	<b>13,005</b>

	1993 (Base Year)		1998 (Year of Opening)		2010 (Horizon Year)	
	Productions	Attractions	Productions	Attractions	Productions	Attractions
<b>Millbrae Avenue BART Station</b>						
Home-Based Work						
Walk	44	941	46	1,021	48	1,116
Auto	4,993	—	5,251	—	5,487	—
Transit	10,065	4,212	10,584	4,572	11,060	4,997
<b>TOTAL</b>	<b>15,101</b>	<b>5,153</b>	<b>15,881</b>	<b>5,593</b>	<b>16,595</b>	<b>6,113</b>
Non-Work						
Walk	73	179	77	194	80	212
Auto	1,320	—	1,388	—	1,450	—
Transit	4,176	1,113	4,392	1,208	4,589	1,320
<b>TOTAL</b>	<b>5,568</b>	<b>1,291</b>	<b>5,856</b>	<b>1,402</b>	<b>6,119</b>	<b>1,532</b>
Air Passengers						
Walk	—	—	—	—	—	—
Auto	—	—	—	—	—	—
Transit	1,044	1,044	1,226	1,226	1,513	1,513
<b>TOTAL</b>	<b>1,044</b>	<b>1,044</b>	<b>1,226</b>	<b>1,226</b>	<b>1,513</b>	<b>1,513</b>
<b>TOTAL</b>						
Walk	116	1,120	122	1,215	128	1,328
Auto	6,313	—	6,639	—	6,937	—
Transit	15,285	6,369	16,202	7,006	17,162	7,830
<b>TOTAL</b>	<b>21,714</b>	<b>7,489</b>	<b>22,963</b>	<b>8,221</b>	<b>24,227</b>	<b>9,158</b>

Source: MTC, BART-SFO AA/DEIR Patronage Forecasts, May 1991  
MTC, BART-SFO SDEIS/DEIR Patronage Forecasts, October 1993  
Parsons Brinckerhoff, December 1993

(1) "Production and Attraction" format used. Productions are those trips where the station is at the home end of the trip. Attractions are those trips where the station is at the destination end of the trip.

10.13. The proposed mitigation for El Camino Real/Sneath is to add approach lanes. However, another possibility is to create a new signalized intersection at the El Camino Real/Tanforan Park Mall entrance intersection located to the south, which would include signal installation and left turn inbound and outbound capability.

**Response.** Please refer to Response 17.6 for a discussion of mitigation measures to El Camino Real/Sneath intersection and the creation of a new signalized intersection at El Camino Real and Tanforan Park Shopping Center.

10.14. All project traffic must access the [Millbrae Avenue] station via Millbrae/Rollins, yet the DEIR proposes no circulation improvements between El Camino Real and U.S. 101. The assumptions used to assess impacts to the Millbrae/101 interchange and Millbrae Avenue between El Camino Real and 101 should be presented and confirmed.

**Response.** Please refer to Response 10.17 for a discussion of impacts to the Millbrae Avenue Interchange of Highway 101 under Alternative VI and the Aerial Design Option LPA. Please refer to Response 6.6 for a discussion of potential improvements to the intersection of El Camino Real and Millbrae Avenue. Please refer to Response 10.15 for a discussion of the improvements planned to the intersection of Millbrae Avenue and Rollins Road.

10.15. The Millbrae/Rollins intersection would control most vehicular access to the station, yet there is little discussion devoted to conditions and traffic control there, despite its proximity to the U.S. 101 access ramps. The analysis assumptions should be presented and confirmed with City staff approval.

**Response.** A substantial number of vehicles would be added to the background traffic at the Millbrae/Rollins intersection under Alternative VI. "Background traffic" refers to the growth in traffic between the 1993 No Build Alternative, which represents current conditions, and a future year No Build Alternative, which would include growth in traffic from sources not related to the BART extension. A significant traffic impact would not occur because this intersection would be substantially improved by proposed BART design features that would increase traffic capacity at this location. Specifically, two lanes are proposed to be added to westbound Millbrae Avenue, one lane to eastbound Millbrae Avenue, one lane to northbound Rollins Road, and two lanes to southbound Rollins Road. The specifics of these improvements will be closely coordinated with the City of Millbrae staff.

10.16. The SFIA EIR predicts that conditions at Millbrae/El Camino Real and Millbrae/Rollins will exceed capacity by a wide margin in 2006 (without a Millbrae Intermodal station). The BART DEIR reports LOS E and LOS D in 2010 at these locations, respectively.

**Response.** Please refer to Response 10.4 for a discussion of conditions as reported in the SFIA Master Plan EIR as compared with the BART extension DEIR/SDEIS. Please refer to Response 6.6 for a discussion of impacts and mitigations for the intersection of El Camino Real/Millbrae. Please refer to Response 10.15 for a discussion of the intersection of Millbrae/Rollins under Alternative VI.

10.17. The Millbrae/101 interchange is projected to reach capacity conditions in 2010 and has an obsolete design yet there is no discussion of improving conditions there. BART station traffic will undoubtedly degrade LOS on the mainline and access ramps yet the DEIR proposes no mitigation measures.

**Response.** An analysis of the northbound weave between the Millbrae Avenue loop on-ramp and loop off-ramp for Highway 101 is forecasted to be at LOS F under the No Build Alternative in 2010 and remains at LOS F under Alternative VI in 2010 with a cumulative impact to this weave segment. Sponsors of the BART-San Francisco Airport Extension in cooperation with other

relevant agencies, including Caltrans, San Mateo County, City of Millbrae, and the SFIA, and based upon programming and design studies led by the City of Millbrae, are committed to contributing their fair share participation in the cost of interchange improvements, which would be based upon the increase due to BART-related traffic.

Possible mitigation measures are described in the FRDEIR/S#2DEIS on pages 3.1-13 and 3.1-14. This improvement would modify the northbound exit ramps from Highway 101 to Millbrae Avenue. Under this design, northbound vehicles accessing the Millbrae Avenue BART Station would be required to use the diagonal off-ramp and turn left at a new traffic signal. This change would reduce the cumulative impact under Alternative VI and the Alternative VI Aerial Design Option to an insignificant level under the No Build Alternative by eliminating the conflicting weave movement with traffic from the northbound loop on-ramp.

- 10.18. The City of Millbrae has developed the Millbrae Station Concept Plan which proposes circulation improvements and changes in station access designed to relieve pressure from Millbrae Avenue, Rollins Road, and El Camino Real. The EIR/SEIS should incorporate these changes, referred to by reference, into its mitigation plan.

**Response.** The design plan for the Millbrae Avenue Station has been modified as indicated in the FRDEIR/S#2DEIS. The new design reflects many of the elements of the Millbrae Station Concept Plan including the new orientation of the parking garage at this station. The new design does not result in any additional significant impacts.

Please refer to Response 6.6 for a further discussion on the El Camino Real and Millbrae Avenue intersection. Please also refer to Response 10.15 for a discussion of the improvements planned at the intersection of Millbrae Avenue and Rollins Road.

- 10.19. The DEIR reports that project impacts on CMP facilities intersections in Burlingame would be very minor. For example, project conditions at Broadway/California would be off by 0.01 from the TSM scenario. These analysis assumptions should be confirmed and presented.

**Response.** The Appendices to the Transportation Technical Report include the calculation sheets for estimating the level of service at all intersections studied for all alternatives in the analysis years. The assumptions on turning movements, signal phasings and lane configurations are presented in these appendices. Please also refer to Responses 14.33 and 14.41 for a discussion of findings at the intersection of Broadway/California.

- 10.20. Table B-40 of the Technical Appendix, Table 3.1-7 in the Summary DEIR/SDEIS, and in Table 3.1-69 in Chapter 3 of the Technical Appendix report inaccurate ridership data....BART must thoroughly investigate this error to determine whether proposed service levels, project impacts, and mitigation measures are accurately assessed.

**Response.** Please refer to Response 10.12 for a revised version of Table B-40 and to Response 17.37 for its relationship to analysis of transit, and parking impacts. Careful review of the traffic analysis and the analysis of implications of typographical errors in Table B-40 found no mistakes in the information used to analyze the level of service at any intersection or in the information used to perform the parking analysis.

- 10.21. Referring the public to a four year-old document to obtain important, relevant information is highly inappropriate because it inhibits a thorough, efficient review for much of the public....The transit patronage assessment must clearly show how the downtown extension would affect transit ridership, traffic conditions, parking demand, and costs. The nature of the BART "Build" alternatives have changed considerably since 1991. Referring reviewers to the old document would not provide an accurate comparison and should therefore be discouraged. Therefore, the final environmental document must include a detailed, accurate assessment of how the CalTrain

Downtown S.F. extension would affect transit ridership on all modes (individually and collectively), and on traffic impacts and BART–SFIA station parking needs.

**Response.** Please refer to Response 11.6 for a discussion of transportation-related impacts to the BART extension with the CalTrain downtown extension.

- 10.22. The description of transit service impacts and transit operating expenses...imply that the authors of the DEIR have a working knowledge of how bus routes would be re-routed to serve the SFIA Extension....It would be very useful to provide some graphic display of how this would be accomplished for each station. Recognizing that schedules will be flexible to meet actual demand, it would also be helpful to provide planned service frequencies.

**Response.** Please refer to Response 14.29 for a discussion of changes in SamTrans bus service with the BART–San Francisco Airport Extension.

- 10.23. BART's ridership and parking forecasts assume that the proposed mitigation measures - single day parking validation and fare surcharges for short rides to SFIA - would dissuade virtually all people from using BART to SFIA from those stations entirely. This is not a reasonable assumption. The short-ride fare surcharges for SFIA would heavily unfairly penalize local users who do not park/ride at these stations, so it is not clear that mitigation measure would be implemented. The single day validation measure would limit long-term/overnight parking but not stop SFIA "day" travelers from using BART.

**Response.** Please refer to Response 10.10 for a discussion of the effectiveness of preventing air passenger parking at BART stations along the BART extension by restricting overnight parking, and for a discussion of using fare surcharges for eliminating air passenger parking at BART stations along the BART extension.

- 10.24. As described in the Transportation Technical report (Transportation Projections and Analysis Methodology Memorandum), and [DEIR/]Technical Appendix page 3.1-163 (Methodology), station parking demand was derived from the traffic models and is based on the application of various MTC/BART-generated factors for auto occupancy and mode split, to the estimated peak hour riders who would access each station by auto. "The inaccurate ridership numbers shown in Technical Appendix Table B-40 (and others) for Hickey and Tanforan stations would yield significantly lower parking demand at these locations than is reflected in page 3.1-182 of the DEIR Technical Appendix."

**Response.** MTC is the regional transportation agency whose traffic models govern all funds related to Bay Area transportation projects. BART's traffic studies utilize MTC's traffic model to generate future projected traffic flows. BART is legally obligated to use MTC's traffic model because it represents consensus traffic figures in the region. BART acknowledges that other traffic models exist, however, they are not the official MTC model and cannot be used in BART's traffic projections. The auto occupancy factors and the forecasts of mode choice, including mode access to BART stations along the BART extension were obtained from MTC and were not derived by BART.

The numbers in Table 3.1-104, Alternative VI Estimated Station Parking Space Requirements, on page 3.1-183 of the DEIR/Technical Appendix are accurate even though typographical errors exist in Appendix Table B-40 in the DEIR/Technical Appendix. Please refer to Responses 10.12 and 10.20 for a discussion of Appendix Table B-40 and a revision of that table.

- 10.25. Due to Tanforan Station's relatively good accessibility from I-280, BART must consider the potential impact of severe traffic congestion along U.S. 101 and Millbrae Avenue leading to Millbrae Station....BART should run some sensitivity tests in its traffic model to determine whether high congestion leading to Millbrae would cause some diversion of trips to Tanforan.

**Response.** The travel demand modeling performed included the congestion levels on Highway 101 when assigning BART auto access trips to the possible BART stations. Some BART riders would use I-280 to access their preferred BART station according to results of the sub-area traffic model used in the DEIR/SDEIS. The sub area traffic model assigned approximately 60 peak-hour auto trips accessing BART to the section of I-280 south of San Bruno. These 60 peak-hour trips are equivalent to a parking demand at a BART station of about 180 parking spaces. Review of the origin zones for trips to the proposed BART stations indicated that the number of trips on I-280 would not increase, i.e., all zones that have reasonable access to I-280 had their traffic assigned to I-280. The traffic model did assign most of these trips to the Millbrae Avenue Station. Drivers could choose other stations than those assigned by the model, including to the Tanforan Station. In a worst case scenario, if all of these automobiles on I-280 continued past the Millbrae Avenue Station to Tanforan, then the parking demand at Tanforan could increase by approximately 180 vehicles. The parking facilities at the Tanforan Station were designed to provide a surplus of 200 parking spaces beyond the forecasted demand in the year 2010.

## 11. PENINSULA CORRIDOR JOINT POWERS BOARD

- 11.1. In Alternative VI, an improved CalTrain connection to SFO may include free transfers between CalTrain and BART, supplemental shuttle bus service to airport employment sites, and other improvements that encourage access to SFO for CalTrain passengers.

**Response.** Per the Comprehensive Agreement Pertaining to BART System Extension, March 1, 1990, BART would establish the basic fare structure consistent with the fare structure throughout the BART system and SamTrans can establish fare surcharges except for the southernmost station on the BART extension. The issue of transfers between CalTrain and BART for access to the Airport is a policy matter which could be addressed by the BART and SamTrans Boards of Directors in an update of this Comprehensive Agreement.

The issue of supplemental shuttle bus service to employment sites would need to be addressed by the SFIA or SamTrans or others. The San Francisco Airport CalTrain shuttle already provides bus service between the Millbrae CalTrain Station and the SFIA terminals and United Airlines Maintenance facility. The shuttle is operated through the Peninsula Corridor Joint Powers Board (JPB) by SamTrans and funding is provided by the SFIA.

Under Alternative VI and the Aerial Design Option LPA, Airport employees arriving on CalTrain from the south would transfer to BART and take BART to the International Terminal Station. From there, employees would either walk to their job site or readily transfer to the ALRS. BART does not propose to provide or finance supplemental shuttle bus service to Airport employment sites, since this would duplicate of the proposed ALRS service. In addition, the commentator is referred to Response 242.6 for additional discussion on air passengers/greeters/workers coming from the south by CalTrain.

- 11.2. The document shows no difference in ridership or travel time among alternatives with regard to CalTrain passengers accessing the airport. This finding should be reexamined.

**Response.** The ridership estimates for CalTrain patrons accessing SFIA are similar among the BART build alternatives. The patronage estimate for SFIA travel was based upon a very detailed assessment of all of the constituent travel times, including transit access time, wait time, ride time, transfer time (where applicable) and walk time. The travel time analysis was based upon separate computations for each leg of the journey for travelers from points north via BART and points south via CalTrain. In addition, separate analyses were conducted for air travelers and visitors who would predominantly travel to and from the air passenger terminal area, and for employees who would also travel to and from areas away from the air passenger terminal area, such as the vicinity of the United Airlines maintenance base. Travel to the air passenger terminal was further desegregated to identify different times for travelers to each terminal pier and the International Terminal. The patronage statistics appearing in the DEIR/SDEIS therefore represent a composite assessment of all of these flows.

Travel time is the major component in estimating transit patronage. For air passengers and visitors traveling between points south via CalTrain and the air passenger terminal, there was no significant quantitative difference between alternatives which would have an external BART station with direct ALRS access versus alternatives which would require a transfer to BART with a walk from the SFIA BART station. In particular, with an external station, air passengers and airport visitors arriving via CalTrain would transfer to the ALRS which would drop them off at the nearest stop in the terminal area. With an internal station, these patrons would transfer to BART and would then walk to their destination within the air passenger terminal from the BART airport terminal stop. Detailed analysis of the travel time indicated that there would be a slight advantage with the external airport BART station (about 4 minutes on a total airport access trip of 30 minutes or more) only for those patrons traveling to or from the farthest terminal piers (Piers C, D & E). However, less than 25 percent of trips to the airport are made to that location. By contrast, travel times would be essentially the same for passengers traveling to or from Piers B and F and travel to the International Terminal would be faster by BART. These latter terminal points account for more than 75 percent of the air passenger travel.

- 11.3. The document identifies minor operational impacts, but provides no mitigation for CalTrain service disruptions during construction of a build alternative. The JPB would like BART to address operational impacts on CalTrain during construction.

**Response.** Although CalTrain service would be disrupted with minor delays, the following additional and revised mitigation measures would reduce the impact to a less than significant level.

Impact number 17 on page 3.13-51 of the DEIR/Technical Appendix is revised as follows:

17. *Construction activity would disrupt CalTrain service. (S)*

Between Forest Lane the I-380 overpass and San Bruno Avenue Cupid Row, the western CalTrain track would be taken out of service for 12 to 18 months. CalTrain service would continue on a single track. Construction of the Hillcrest Boulevard underpass of the CalTrain tracks would take about four months and may cause delays to CalTrain service CalTrain service would continue on two tracks.

Relocation of CalTrain tracks in the vicinity of the Millbrae Station would require approximately four months.

MITIGATION MEASURES. The following measure would reduce construction impacts to CalTrain service. Minor delays would be insignificant (remain significant and unavoidable.)

On page 3.13-51 of the DEIR/Technical Appendix, add the following text to the end of Mitigation Measure 17.1:

All shooflies will be equipped with power switches and the controls tied into the automatic block signal system to avoid major delays.

On page 3.13-52 of the DEIR/Technical Appendix, revise the name of the mitigation measure as follows:

17.4 *Maintain Two-track Operations During Construction at Hillcrest Blvd. and Millbrae Station.*

On page 3.13-52 of the DEIR/Technical Appendix, add the following at the end of Mitigation Measure 17.4:

Temporary shooflies will be used at these locations to maintain train operations on two tracks.

17.5. Temporary Relocation of San Bruno Passenger Station. During construction of the subway, the existing CalTrain station platforms, shelter, and parking must be moved to the vicinity of the I-380 overpass. Upon completion, the station facilities would be moved back to the existing location.

- 11.4. [BART should address] measures to insure that build alternatives do not preclude future CalTrain improvements such as electrification and high speed rail service.

**Response.** Future CalTrain improvements such as electrification and high speed rail will not be precluded and will be jointly coordinated by the JPB and BART.

- 11.5. The document projects that Build alternatives will result in an average net increase of \$1.7 million annually in CalTrain operating costs (in 1993 dollars) compared to the figures for the TSM alternative. While there is no indication of how these additional costs would be addressed, we believe that assignment of this increment is integral to an adequate financing plan for any of the relevant alternatives.

**Response.** BART would provide temporary locations for JPB facilities affected by construction work in accordance with JPB requirements. BART is not aware of JPB assumptions nor estimates for the stated \$1.7 million operating costs as BART's construction is not intended to reduce CalTrain service.

- 11.6. The JPB is aware that effects of a CalTrain downtown extension were examined in the original BART/SFO AA/DEIS/DEIR. However, we believe it would be useful to reincorporate this information in the present study, provided the analysis does not impact early certification.

**Response.** The impacts of the BART extension with and without the CalTrain downtown extension in San Francisco were described in the 1992 AA/DEIS/DEIR, which is an underlying document of the DEIR/SDEIS. Moreover, impacts of the proposed BART extension with and without the CalTrain downtown extension were described in the FRDEIR/S#2DEIS. These impacts were analyzed despite the fact that the proposed CalTrain downtown extension was, and is, a highly speculative project. At the time the DEIR/SDEIS was completed, no environmental documentation for the proposed CalTrain extension had been initiated and no funding had been identified. Since completion of the DEIR/SDEIS, a new MTC CalTrain Relocation Study was conducted and a draft environmental documentation for the proposed CalTrain extension was commenced. Nonetheless, a route to, and site for, the CalTrain terminus has not been finalized and no funding has been committed to the proposed project. In short, the proposed CalTrain extension may never be built or may be built in an entirely different from that that currently proposed. Thus, additional analysis of the proposed CalTrain extension is premature and not warranted at this juncture. Furthermore, by excluding the proposed CalTrain extension, the traffic impacts identified for the BART extension are conservatively estimated. This results because BART patronage, including those persons accessing stations by auto, would be greater without the CalTrain downtown extension, as indicated in the AA/DEIS/DEIR.

The AA/DEIS/DEIR examined the differences in patronage and transfers on the relevant transit systems with and without the CalTrain downtown extension. Total BART boardings decreased by approximately four percent with the CalTrain downtown extension. Total CalTrain boardings under the BART build alternatives increased by 24 percent with the downtown extension.

BART would have a total of 399,500 boardings under the Base Case Alternative in the year 2010 without the CalTrain downtown extension compared to 383,700 boardings with the CalTrain extension in the same year, according to the AA/DEIS/DEIR. In other words, without the CalTrain downtown extension, there would be 42,600 more boarding on BART under the Base Case Alternative in 2010; with the CalTrain extension, the increased boardings on BART would be 26,800.

CalTrain would have 46,600 boardings under the Base Case Alternative in 2010 without the downtown extension, compared to 57,700 with this extension, according to the AA/DEIS/DEIR. In terms of a net change in CalTrain ridership, boardings increase by 8,300 without the downtown extension compared to 19,400 boardings in 2010 with this extension. As presented in the AA/DEIS/DEIR, the increase in CalTrain boardings from the No Build Alternative is greater under the TSM Alternative: boardings increase by 11,200 without the downtown extension and by 28,800 boardings with the downtown extension.

The underlying assumptions used in MTC's travel demand model in the AA/DEIS/DEIR remained the same when MTC performed additional modeling analysis for the DEIR/SDEIS. The definitions of 1992 LPA and the Base Case Alternative were identical in the AA/DEIS/DEIR and DEIR/SDEIS. Using the patronage forecasts for the Base Case Alternative in both studies as the basis for comparison, simplified estimates of BART and CalTrain patronage with the CalTrain downtown extension can be made for BART build alternatives that were not included in the 1992 AA/DEIS/DEIR study. For example, total BART boardings under Alternative IV in 2010 are 399,800 as reported in the DEIR/SDEIS. These would decrease to approximately 384,000 boardings under the same BART alternative with the CalTrain downtown extension based on the change in boardings under the Base Case Alternative with and without the CalTrain downtown extension. That is 399,500 boardings is to 383,700 boardings under the Base Case Alternative with and without the downtown extension as 399,800 boardings is to 384,000 boardings under Alternative IV with and without the downtown extension. The number of boardings under Alternative IV with the CalTrain downtown extension is not based on new analysis but represents an approximation based on the original analysis in the AA/DEIS/DEIR. This simple method of comparison can be used because the underlying assumptions for modeling the Base Case Alternative in the AA/DEIS/DEIR are the same as those used to model Alternative IV, as well as Alternative V, Design Options V-A and V-B, and Alternative VI, in the DEIR/SDEIS.

The FRDEIR/S#2DEIS contains tables and text addressing BART and CalTrain boardings with and without the CalTrain Downtown Extension under the Alternative VI Aerial Design Option. For example, Table 3.1-2 in the FRDEIR/S#2DEIS indicates that BART boardings under the Aerial Design Option X in 2010 decrease from 401,400 boardings without the CalTrain Downtown Extension to 385,500 boardings with the CalTrain Downtown Extension. A similar method was used to estimate transfers between the three transit systems, that is BART, CalTrain and the proposed ALRS under the Aerial Design Option.

An exception to this method of factoring based on Alternative 3A and 3B in the AA/DEIS/DEIR was made for the BART-CalTrain transfers under the Aerial Design Option. The CalTrain Downtown Extension would affect transit patronage to and from downtown San Francisco, but it would not affect the number of CalTrain riders in San Mateo County going into and out of the SFIA. Under the Aerial Design Option in 2010, 5,200 CalTrain riders from south of the SFIA are estimated to travel to and from the SFIA, with BART providing the only direct rail access to the SFIA. These riders were subtracted from the 24,200 transfers between BART and CalTrain under the Aerial Design Option before the factoring was applied, because the CalTrain Downtown Extension would not affect their destination choice of the SFIA. Once the factoring was performed, these 5,200 CalTrain riders were added back to the number of transfers between BART and CalTrain to arrive at the 11,800 transfers under the Alternative VI Aerial Design Option with the CalTrain Downtown Extension.

## 12. CITY AND COUNTY OF SAN FRANCISCO PLANNING DEPARTMENT

- 12.1. The text of both the Summary ([DEIR]/SDEIS) and the DEIR/[Technical Appendix] fail to account for encroachment on or the need to acquire considerable amounts of property owned by the City and County of San Francisco. Many of the drawings in the Design Appendix note CCSF properties but rarely in the EIR text is there any discussion of impacts to or acquisition of those properties.

**Response.** Please refer to pages 3.2-55 and 3.2-56 of the DEIR/Technical Appendix for a discussion of the methodology for analyzing acquisition and displacement. The impact of land acquisition for the BART extension was considered significant if a building or active land use were displaced. The DEIR/SDEIS does make reference to the need to acquire property owned by the City and County of San Francisco. Impact 3 on page 3.2-57 of the DEIR/Technical Appendix, makes such a reference, and similar references are made on pages 3.2-66 and 3.2-68. The Design Appendix, an official part of the document, notes and identifies City and County of San Francisco properties. The acquisition of City and County of San Francisco properties is discussed in similar detail to the acquisition discussion of the SPTCo right-of-way, which also would involve displacement of land uses.

- 12.2. For NEPA purposes, economic impacts are also appropriately analyzed; economic impacts to the San Francisco Water Department from loss of any revenue from businesses that lease City and County properties and would be displaced or temporarily inconvenienced due to the BART project should be noted and appropriate mitigation measures described.

**Response.** Any significant displacement impacts would be mitigated in accordance with appropriate state and federal acquisition and relocation laws as described on page 3.2-57 of the DEIR/Technical Appendix.

- 12.3. Many of the drawings in the Design Appendix seem to omit designation of all or part of the CCSFWD properties; see, e.g., pages 12, 30, 39, 45, 44, 50, 51, 52, 56, 77, 78, 79, 83, 84, 87, 88 and possibly others.

**Response.** The commentor's remarks relating to missing references in the DEIR/SDEIS Design Appendix are correct. An updated set of drawings is included as Volume IV of this FEIR/FEIS.

- 12.4. The Cultural Resources Regulatory Framework subsection lists only CEQA as providing "protection" of cultural resources under State law. First, CEQA does not in itself provide protection, although it does provide for detailed public disclosure. Second, the Native American Heritage Commission and the State laws that establish it also require that protection be provided for any native American remains that might be discovered during BART construction (see, e.g., Cal. Pub. Res. Code 5097.98 and 5097.99). It would be useful for BART's decisionmakers and the public for the EIR to review these laws and augment this subsection of the report.

**Response.** CEQA provides protection to cultural resources through full public disclosure of potential impacts to those resources and the requirement that impacts be mitigated when feasible. Mitigation Measure 6.1 (page 3.4-17 of the DEIR/Technical Appendix) requires a Memorandum of Agreement (MOA) to be adopted by agencies, including the SHPO, to contain measures that satisfy the provisions concerning identified significant cultural resources. Although not specifically mentioned, significant cultural resources include Native American remains provided for in the Health and Safety Code (added Section 7050.5) and the Public Resources Code (Section 5097.94, -.98, and -.99).

To assure compliance with the Public Resources Code provisions regarding human remains, Mitigation Measure 2.1 of the DEIR/Technical Appendix on page 3.4-15 is revised by adding the following at the end of the paragraph:

If human remains are uncovered during project implementation, work in the sensitive area will cease temporarily and the Coroner will be notified immediately. If the Coroner determines that the remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, who will immediately notify those persons it believes to be most likely descended from the deceased Native American.

- 12.5. The Project Description Chapter and the Design Appendix describe several alternatives, including the Locally Preferred Alternative and Alternative III, as including a subway in the Colma and South San Francisco portions of the alignments. Neither the text nor the drawings provide enough detail to determine whether and how subway construction and operation would prevent potential settlement and resulting damage to major water supply pipelines owned and operated by the San Francisco Water Department. In fact, there appears to be no mention of possible impacts to the Crystal Springs Pipelines Nos. 2 and 3 at West Orange Avenue and other major water supply pipelines owned by the San Francisco Water Department that traverse the project area. Potential settlement of soils in the vicinity of pipelines could cause problems; this is not mentioned in the Geology section of Chapter 3.

**Response.** Mitigation of construction-induced settlements is discussed on pages 3.13-107 through 3.13-110 of the DEIR/Technical Appendix. Acceptable limits for settlement will be established based on the results of site-specific geotechnical studies performed during project design. Established settlement limits will be enforced during construction. Provisions will be made for protection of all utilities crossing the BART alignment, as discussed on pages 3.13-101 through 3.13-106 of the DEIR/Technical Appendix.

- 12.6. Construction vibrations could also affect the SFWD pipelines, but this is not discussed in the section on Construction Impacts.

**Response.** Except for impact or vibratory pile driving, construction vibration would not be of sufficient magnitude to endanger SFWD pipelines or other utility lines. Typical construction vibration is normally not a problem for buried pipelines and is not expected to be so for this project. The proximity of pile driving to SFWD pipelines, if impact or vibratory pile driving is to be used near utility lines, will be examined in the preliminary design phase of the project. Restrictions on vibration amplitude from pile driving may need to be imposed where SFWD or other utility pipelines are close enough to be of concern. Groundborne vibration from BART train operations would not be of sufficient magnitude to damage buried utility lines.

- 12.7. Construction impacts on utilities are discussed generally in the Construction section on pages 3.13-11 and 3.13-12 of the DEIR/Technical Appendix. However, the SFWD pipelines are not the typical in-street utilities. They are major supply pipelines providing water for hundreds of thousands of customers.

**Response.** All SFWD water mains will be protected and maintained in place during construction. Where water mains are to be supported in place while the BART subway is constructed in an open cut below the utility, the drawings and calculations of the supporting system, as well as the backfill procedures after the BART subway is completed, will be submitted to the SFWD for review and approval. Please also refer to Response 12.5 for a discussion of construction-induced settlement and Crystal Springs Pipelines Numbers 2 and 3.

- 12.8. Would any of the BART alternative alignments reduce access to the San Francisco Water Department pipeline rights-of-way such that maintenance activities could be impaired? That is, if a water supply pipe located under the BART track were to need maintenance, how would it be accomplished?...Prior to publication of the Final EIR/EIS, it would be useful for the EIR staff to contact the SF Water Department Millbrae office directly to determine these pipeline locations.

**Response.** According to BART's engineering consultants, the Bay Area Transit Consultants (BATC), there are no San Francisco Water Department pipelines below the proposed BART alignment. Accordingly, city staff will continue to have access to the pipelines for maintenance and repairs. Coordination with SFWD staff will continue during preliminary design to determine detail impacts and design solutions.

- 12.9. The Design Appendix drawings identify several additional possible laydown areas that appear to fall at least partially within SFWD row locations. The text should be amended to reflect these additional possibilities.

**Response.** The following text is added to the list of possible laydown areas for the three reaches between Forest Lane and Millbrae Avenue on page 3.13-8 in the DEIR/Technical Appendix:

- **San Francisco Water Department Right-of-Way.** This stretch adjacent to the alignment could serve as a staging and access area for construction equipment.

- 12.10. The Design Appendix also consistently shows "temporary construction easements" that overlap all or portions of the CCSF Water Department right-of-way on many of the drawings. This potential use of San Francisco property does not appear to be mentioned in the text. This temporary construction easement also appears on the drawings to impact many land uses not mentioned in the Construction/Land Use discussion.

**Response.** Please refer to Response 12.1 for a discussion on land acquisition. Construction easements refer to areas where temporary access will be needed during the construction process. These are identified only where the temporary access needed would disrupt the use of the land. BART's proposed use of City and County of San Francisco properties for temporary construction easements is not expected to impede the existing land uses or disrupt existing business operations. If such disruption were to take place, acquisition and relocation would be conducted in accordance with appropriate state and federal laws.

- 12.11. It is odd, at best, that the EIR for a transit project, which is clearly intended to reduce automobile use in the region, labels unfilled demand for parking spaces as a significant environmental impact. What is the justification for calling out the wish for more parking at BART stations as a significant effect on the environment?

**Response.** The forecast mode of access to a BART station for a federally funded extension of BART is determined by the federally approved MTC travel demand model. The mode choice component of this model determined the number of patrons accessing the station by auto and whether they park and ride or are dropped off at the station. If demand for parking spaces is not matched by the supply the result is spillover parking in the vicinity of the station that causes disruptions to residential or commercial activities in the area.

- 12.12. Even more surprising for a transit project is the suggestion that providing more parking spaces mitigates the parking demand "impact" (see, e.g., page 3.1-168). Such a "mitigation measure" instead permanently attracts more vehicles to an area, causing more localized air pollution. Wouldn't additional transit service to BART stations also reduce a parking demand problem, if one must provide mitigation measures for this non-significant impact?

**Response.** Motorists that are unable to park at a BART station must drive farther to find parking in the vicinity, drive to a different BART station, or be driven to their destination causing more vehicle emissions. As explained in Response 12.11, the mode of access to the station was determined in the mode choice model.

CalTrain and bus service to the BART-San Francisco Extension stations is a basic assumption in MTC's travel demand model and this service was increased in the model to ensure that supply was

not a constraint to potential demand for transit access to the proposed BART stations. If parking were to be decreased, then other significant impacts, such as spillover parking and other disruptions to the local communities, would require mitigation that would lead to increasing the parking supply.

### 13. CITY OF BRISBANE

- 13.1. In all the alternatives, projected CalTrain ridership with the proposed downtown extension of CalTrain in place should be included.

**Response.** Please refer to Responses 9.1 and 11.6 for discussions of the analysis of CalTrain patronage and the proposed downtown extension.

- 13.2. There seems to be a lack of precision in regard to realistic cost estimates....Any serious consideration of alternatives depends upon realistic economic projections of costs.

**Response.** The capital cost figures shown in the DEIR/SDEIS are, as noted, conceptual cost estimates, as was appropriate before an LPA was selected. Preliminary engineering, which is the basis for more refined cost estimates, is carried out only for the LPA.

The conceptual cost estimates seen in the DEIR/SDEIS were defined by developing a unit-cost data base from the experience of the three BART extension projects under construction at the time. This opportunity to rely on current, geographic-specific, contractor-specific cost information for a major public sector construction project is very uncommon, and gives greater certainty to the conceptual costs than would normally be expected prior to selection of a project.

- 13.3. The DEIR/SDEIS does not adequately address the impact of the commitment of public funds to this project on other transportation systems in San Mateo County. It is necessary to include an analysis of the financial impact on SamTrans, which we believe to be potentially disastrous, as the operator of our bus system and CalTrain as well as the proposed financial partner for BART in San Mateo County.

**Response.** Please refer to Response 10.1 for a discussion of the SamTrans role in financing the project and its capacity to support its portion of the funding.

- 13.4. Other alternatives should also be addressed. We believe the EIR should also look closely at the Cal-BART proposal and the potential to realign CalTrain tracks to serve SFO.

**Response.** CalBART has been proposed to replace the BART extension and CalTrain Downtown San Francisco Extension/Electrification/Upgrade projects. "The goal of the project is to maximize the use of committed funding to provide high-speed electric rail service at close headways between San Francisco and San Jose" (CalBART Bay Area Rail Project, March 1995, by Michael Kiesling/Regional Alliance For Transit). CalBART would upgrade and electrify the CalTrain mainline between San Francisco and Gilroy. The proposal would extend CalBART from the existing San Francisco terminus at Fourth and Townsend to the Transbay Terminal in downtown San Francisco. The CalTrain mainline would be relocated between the Millbrae and South San Francisco Stations. North of the Millbrae Station, the CalBART line would curve northeast under Highway 101 to serve the new Airport International Terminal. The station would be built to accommodate future, intercity high speed rail. North of the International Terminal, the alignment would continue underground and rise to a new San Bruno/United Airlines Maintenance Center Station. See Figure R-1 of the CalBART document cited above.

Three new CalBART stations would be provided between Millbrae and South San Francisco. The existing CalTrain station in San Bruno would be replaced by two new stations, one at the I-380/Highway 101 interchange (at the United Airlines maintenance facility) and another beneath

the new SFIA International Terminal Ground Transportation Center (GTC). The South San Francisco CalTrain Station would be relocated approximately 1,200 feet north of its existing location.

CalBART would provide 185 trains per weekday with 10-minute peak and 15-20 minute midday service with skip-stop operation. This compares with the proposed BART extension with 328 trains per weekday with 4.5 minute peak and 7.5 minute midday service.

For more details, see *CalBART Bay Area Rail Project*, March 1995, by Michael Kiesling of the Regional Alliance For Transit and (CalBART), April 25, 1995 by Sherman Lewis, BART Director.

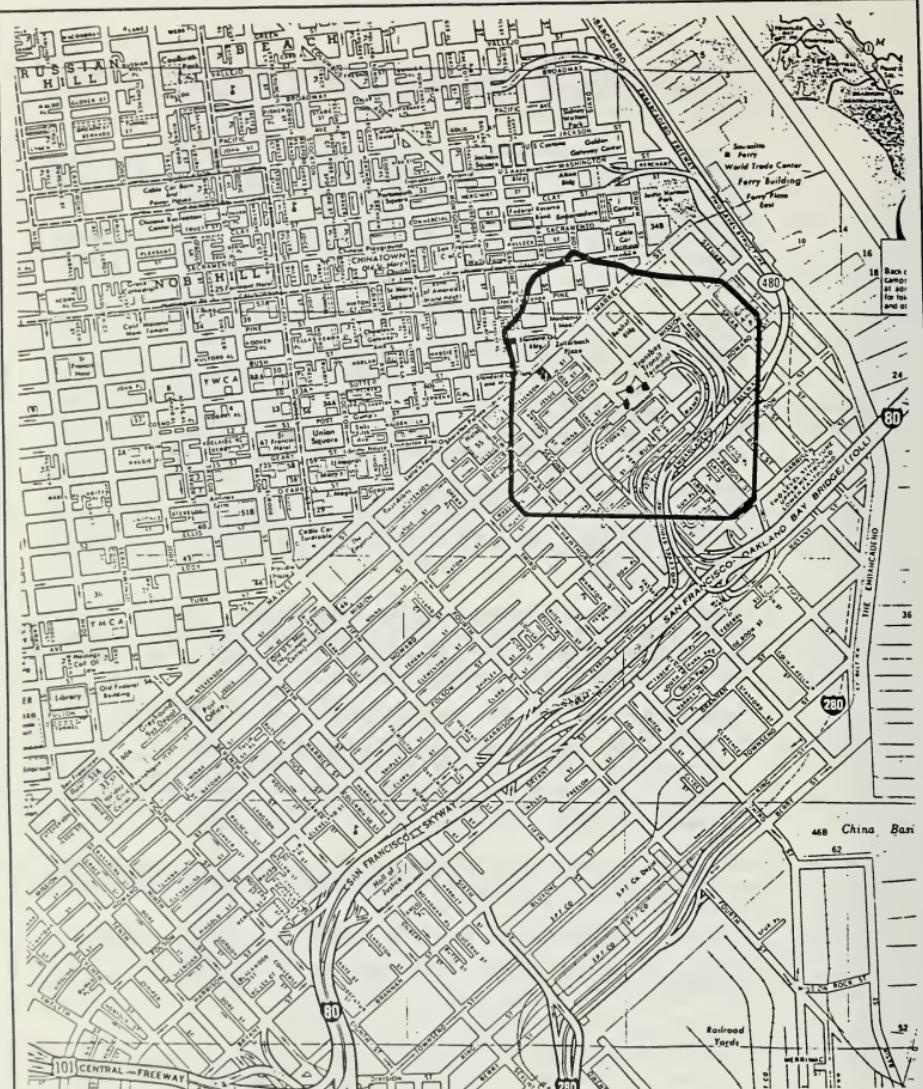
*Connectivity.* Figure 13.4-1 shows the area that can be reached within a 0.3-mile (5 to 10 minutes) walking distance of the Transbay Terminal. A CalBART station at the Transbay Terminal is within a 0.3 miles walking distance of many more jobs in downtown San Francisco than would be a CalTrain Transbay Terminal Station. The CalBART Transbay Terminal Station does not provide walking access to the entire Financial District. By comparison, Figure 13.4-2 shows a 0.3-mile walking distance from the four BART stations on Market Street. The existing Embarcadero, Montgomery, Powell, and Civic Center BART stations are within a 0.3-mile-radius walking distance of an even greater number of jobs in San Francisco. The four BART stations on Market Street provide walking-distance access to the Financial District, the Embarcadero, Union Square, and the Civic Center. San Mateo residents working in the Civic Center, retail areas near Union Square, or most of the San Francisco financial district would have more convenient access via BART than they would have via CalBART extended to the Transbay terminal. This holds true for San Mateo residents employed in the East Bay, and East Bay residents who travel to San Mateo County to work.

*Engineering/Capital Costs.* The proponent estimates that CalBART's capital cost is \$1,186 million in 1994. These costs appear to be underestimated with regard to real estate acquisitions, cut-and-cover construction through the Airport, and do not include major cost items. Unit costs appear to be low relative to all civil costs for railroad work.

Numerous functional elements necessary to support CalBART are not estimated, such as:

1. The CalBART proposal assumes cut-and-cover construction through Airport aircraft operating areas. It is the policy of the SFIA that no cut-and-cover line construction be permitted on active aircraft activity areas or through roadways. A CalBART alignment into the Airport would need to be tunneled. Tunneling CalBART instead of cut-and-cover construction would increase its capital costs.
2. Right-of-way costs for alignment and station sites for the new San Bruno and South San Francisco Stations require acquisitions of industrial/commercial properties north of the SFIA. These costs are not addressed.
3. Costs for encountering hazardous materials in tunneling through the SFIA are not addressed.
4. Costs for required utility relocations related to the new alignment east of the SPTCo are not addressed.
5. Costs for tunnel ventilation through the SFIA are not addressed.
6. Costs for providing moving sidewalks from the Transbay Terminal to 2nd and Market are not indicated.

Construction of CalBART would begin after the SFIA expansion program, including completion of the new International Terminal. This would complicate construction and raise its capital costs. This contrasts with BART's LPA schedule, which is coordinated with the Airport's construction schedule.

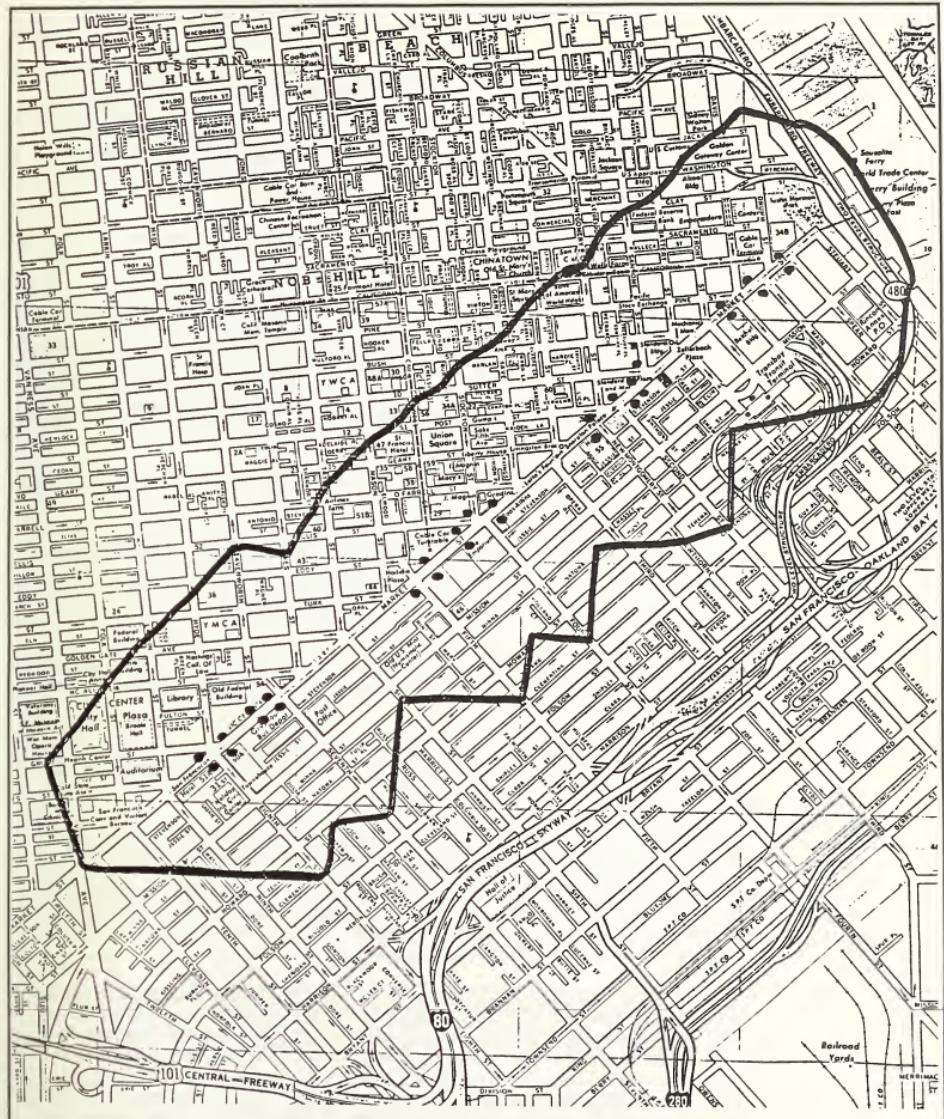


**OGDEN**

Area within 0.3 Miles Walking Distance  
of the Transbay Terminal

FIGURE

13.4-1



**OGDEN**

Area within 0.3 Miles Walking Distance  
of a BART Entrance

FIGURE

13.4-2

The proposed cut-and-cover construction of the CalBART station under the north wing of the International Terminal would be difficult and expensive. The foundations of the International Terminal would need to be supported in place and underpinned to construct the CalBART station. The piles in the path of the subway CalBART station would then be removed. This alternative could result in closing portions of the International Terminal during construction, which would be a significant impact on the Airport's airside and landside operations.

*Major Environmental Impacts.* The CalBART proposal has the following major environmental impacts:

1. North of the CalTrain Millbrae Station, the CalBART alignment curves northeast, crossing through the Airport's west of Highway 101 property at grade, and then descends to cross under Highway 101. The at-grade CalBART alignment on the Airport property west of Highway 101 would significantly affect wetlands and habitat of the San Francisco garter snake, an endangered species. In its comments on the DEIR/SDEIS, the California State Department of Fish and Game notes that the most significant impacts associated with the 1992 LPA would result from the development of an intermodal station on the Airport's west of Highway 101 property. An at-grade CalBART alignment through the wetlands and sensitive species habitat would have similar impacts.
2. The at-grade alignment and new San Bruno Station near the United Airlines Maintenance Center would disturb wetlands.
3. The relocated alignment north of Millbrae Avenue and east of the SPTCo right-of-way traverses through the Bayside Manor and Marino Vista/North Millbrae residential areas. Millbrae Councilmember, Janet Fogarty, believes that "CalBART plans are extremely destructive to Millbrae residential neighborhoods." (Letter from Millbrae City Councilmember Janet Fogarty to the BART and SamTrans Boards of Directors, April 26, 1995).
4. Without grade separations, the proposed tripling of service from 60 to 185 trains per day would exacerbate already serious traffic congestion at CalTrain/grade crossings along the Peninsula.

*Funding.* CalTrain's funds will be derived from Rail Modernization Funds, while BART's SFIA extension will use New Starts Funding. The funds are discrete, and not interchangeable, and cannot be transferred from one project to another.

The funding principles underlying the financing plan for the CalTrain extension to downtown San Francisco and upgrades are summarized in MTC Resolution 1876. Resolution 1876, updated on February 27, 1991, proposes \$226.7 million in funding from a 1/2 cent sales tax in San Mateo County; \$232.2 million in combined funding from San Francisco, San Mateo, and Santa Clara Counties; \$146.2 million in federal Section 3 Rail Modification funds; and \$29 million from the State of California. The CalTrain federal Rail Modification funding is targeted for CalTrain upgrades and the extension to downtown San Francisco.

*Operating Cost.* The existing CalTrain service has a 60-trains-per-day schedule, with annual operating and maintenance costs of \$44.7 million and annual passenger revenue of \$18.2 million. This results in a net annual deficit of \$26.5 million and a farebox recovery of 40.7 percent. This annual deficit of \$26.5 million is funded by San Francisco, San Mateo, and Santa Clara counties.

CalBART's 185-train schedule is estimated by the proponent to have annual operating and maintenance costs of \$98.8 million and annual passenger revenue of \$61.4 million, resulting in a net annual deficit of \$37.4 million and a farebox recovery of 62.1 percent.

Under the CalBART proposal, the net annual deficit is projected by the proponent to rise to \$10.8 million, from \$26.4 million for existing CalTrain and \$37.4 million for CalBART. No source for

this larger annual operating deficit is identified. This larger annual operating deficit is based on weekday ridership forecasts described below.

*Process.* The DEIR/Technical Appendix (page 2.99) presents a discussion of the alternatives selection process.

On March 21, 1995, the BART Board of Directors in Resolution 4557 resolved that:

1. The board supports continued evaluation of only those modes and alignments currently under study in the DEIR/SDEIS which reflect and carry forward the decisions previously made in an extensive regional and federal process to pursue the BART mode for extending transit service south from San Francisco to the SFIA; and
2. The board does not support additional analysis of alternatives, modes, or corridors which have previously been considered as part of the Alternatives Analysis process or were not proposed as part of the 20-year regional planning process.

The BART board rejected further study of the CalBART proposal for the following reasons:

- 1) In 1972, the San Francisco Airport Access Project Report, which studied 20 alternatives for connecting the BART System with the San Francisco International Airport, was completed;
- 2) In 1984 and 1985, the Metropolitan Transportation Commission (MTC) undertook a Peninsula Mass Transit Study which recommended a long-term strategy for improving and expanding rail service on the San Francisco Peninsula;
- 3) In response to this study, the Federal Transit Administration (FTA) authorized the initiation of a federal Alternatives Analysis/Draft Environmental Impacts Statement (AA/DEIS) process in 1990 for a project corridor in northern San Mateo County;
- 4) Federal and state environmental processes were combined to result in an Alternative Analysis/Draft Environmental Impact Report (AA/DEIS/DEIR) for the BART-San Francisco Airport Extension which was completed by MTC in March, 1992;
- 5) The Alternatives Analysis process reviewed 23 alternatives which assessed all feasible modes, including BART, CalTrain, light rail, and bus, and identified seven alternatives for connecting the BART system with the San Francisco International Airport;
- 6) As a result of the studies and processes cited, it was concluded that BART technology was the selected mode for improving and expanding rail service on the peninsula in the corridor from Daly City to Colma and from Colma to the airport along the Southern Pacific right-of-way, and all other modes and corridor studies were eliminated;
- 7) Following completion of the AA/DEIS/DEIR, BART engaged in preliminary engineering and prepared a Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (DEIR/SDEIS), which was completed in January, 1995, for five specific build alternatives for BART service in the defined corridor;
- 8) The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) affirmed and authorized the selected corridor and project for federal investment identified in ISTEA as an extension of the San Francisco Bay Area Rapid Transit District to the San Francisco International Airport (Phase 1a to Colma and Phase 1b to San Francisco Airport);
- 9) The Board recognized that if the BART-San Francisco Airport Extension as defined is not constructed, BART would not receive an estimated \$330 million from the San Mateo County Transit District (SamTrans) pursuant to its Comprehensive Agreement Pertaining to BART System Extension dated March 1, 1990, which funds are to be used for the local share of the BART/San Francisco Airport Extension and the construction of BART extension in Alameda and Contra Costa Counties;

- 10) \$230 million of these funds are slated for East Bay Extension projects and are contingent upon construction of the BART/San Francisco Airport extension;
- 11) \$86 million dollars of the anticipated funds from the BART-SamTrans Agreement are required for the completion of BART's East Bay Phase I Extensions which are currently in construction to East Dublin/Pleasanton and Pittsburg/Bay Point; and
- 12) If those funds are not forthcoming from the BART-SamTrans Agreement, the resulting shortfall will necessarily be required from other sources and the ultimate burden may have to be borne by BART's riders and/or the tax payers of the counties served by the extensions.

MTC's New Rail Starts and Extensions Program (Resolution No. 1876) identifies the BART-San Francisco Airport Extension and the CalTrain extension to downtown San Francisco as top regional priorities. The CalTrain extension is an active proposal. The extension of CalTrain to downtown San Francisco and upgrades including electrification were recently analyzed in the CalTrain San Francisco Downtown Extension/System Upgrades Final Report, March 1994. At the conclusion of that study, the Peninsula Corridor Joint Powers Board, in Resolution No. 1994-8, selected Alternative 8B-Surface/Subway to Market and Beale with electrification of CalTrain as the CalTrain Locally Preferred Alternative. This LPA and other CalTrain alternatives will soon be under study in a new Draft EIR/EIS.

The CalBART proposal requires significant modification to the Resolution No. 1876, and regional accord would be a major undertaking. A minimum of three to four years would be required to change MTC Resolution No. 1876, obtain FTA approval to study CalBART, prepare an environmental impact statement and report, and orchestrate funding. This delay makes CalBART infeasible, since its development would not move forward concurrent with the Airport's master plan construction schedule.

*Projected Weekday Ridership.* Ridership is estimated to be 104,050 at 30 stations in San Francisco, San Mateo, and Santa Clara counties in year 2010 by MTC based on the following assumptions by the Regional Alliance For Transit: 1) \$3.00 per day parking charge above any current parking charges for every vehicle/driver/commuter; 2) Greenbelt preserves (shifts Association of Bay Area Governments projected population growth from lower density suburban and rural areas to the urban core); 3) more investment in transit and less for highways; and 4) high-density, transit-oriented development around stations.

These assumptions, while certainly beneficial to transit, require action by all of the jurisdictions served by CalTrain and are not federally-approved modeling assumptions used for major investment studies.

*Grade Separations.* The CalBART proposal does not include grade separations, estimated by the San Mateo County Transportation Authority to cost \$326.2 million (1989\$). Without grade separations of CalBART with cross streets, the proposed tripling of service from 60 to 185 trains per day would be problematic. The costs, right-of-way takes, and environmental impacts for these grade separations are not addressed in the CalBART proposal.

Without grade separations of CalBART on the Peninsula, the proposed tripling of train service would exacerbate already serious traffic congestion at cross streets and increase train/vehicle and train/pedestrian hazards.

**Conclusion.** The CalBART alternative appears neither practicable nor feasible and thus has been eliminated from further review.

## 14. CITY OF BURLINGAME

- 14.1. We would express our strong preference for the TSM alternative with an extension to downtown San Francisco. We are committed to the idea that providing access from CalTrain to the airport and better CalTrain access to a central downtown San Francisco transit hub, would best serve (in terms of time and cost) the present and future mass transit needs of the residents and employees of Burlingame.

**Response.** The commentor's preference for the TSM Alternative has been noted and was considered by the BART and SamTrans boards during the LPA selection process after the close of the public review and comment period. However, as described in Response 2.7, both boards selected Alternative VI Aerial Design Option as the LPA, which does not preclude CalTrain improvements. Please refer to Response 9.1 for a discussion of the reasons the CalTrain Extension to downtown San Francisco was not included in the alternatives studied in the DEIR/SDEIS.

- 14.2. We are opposed to the proposed Alternative VI Millbrae Station. This alternative would place the end-of-the-line station with the only cross platform from CalTrain to BART at our northern city boundary and a 1500 foot long tailtrack in Burlingame.

**Response.** The commentor's opposition to the Alternative VI Millbrae Station has been noted and was considered by the BART and SamTrans Boards when they selected the LPA at the close of the public review and comment period (see Response 2.7). Nonetheless, both boards selected the Alternative VI Aerial Design Option as the LPA. The approval of a particular BART extension alternative will not occur until after completion of the environmental review process and further evaluation of the project's economic and funding viability, environmental implications, and engineering feasibility. Please refer to Response 10.18 for a discussion of design modifications to the Millbrae Avenue Station.

- 14.3. Further we are concerned about the impact of Alternative VI or any BART extension on the economic viability of SamTrans. Burlingame residents and our neighbors to the south rely heavily on SamTrans as a means of transportation to work, shop and recreate. If SamTrans' financial resources are sapped by its obligation to BART and bus routes are curtailed, it will have a serious effect on the whole county's economic and physical environment, e.g. deterioration of air quality, intersection capacity, increase travel times, etc.

**Response.** Please refer to Response 10.1 for a discussion of SamTrans's financial capacity and participation in the project.

- 14.4. We would strongly suggest that you contact our city staff and involve them in review of your revised studies and suggested mitigations. It is unfortunate that there was so little communication from your consultants during the preparation of the DEIR/SDEIS document.

**Response.** Representatives of the City of Burlingame, and all other affected agencies, were contacted throughout preparation of the DEIR/SDEIS. BART will seek City staff involvement in the development of the proposed project.

- 14.5. We would note that recently the San Francisco Airport completed an EIR on their proposed Master Plan....This document indicated significant impacts on the same areas on 101 and in Burlingame and Millbrae that your DEIR/SDEIS identifies. However, you do not address these cumulative impacts. The airport expansion plan offered no off site mitigation for their impacts and you offer none either.

**Response.** The cumulative impacts of the SFIA Master Plan were included in the BART extension DEIR/SDEIS. The travel demand model used to forecast transit patronage and traffic

volumes was based on population and employment projections by the Association of Bay Area Governments (ABAG). Special attention was given to review these forecasts and compare their results to projections contained in the San Francisco International Airport EIR. Vehicle trips were added to the trip tables provided by the Metropolitan Transportation Commission (MTC) to match the mid-range forecasts made in SFIA EIR. (Note: Mid-range was defined by averaging the high-end and low-end forecasts of vehicle trips.) Significant impacts were defined in the BART extension DEIR/SDEIS for the entire study area, not just along the project alignment and mitigations were provided for these impacts or significant and unavoidable impacts are noted.

If the intent of off-site mitigation in the comment means outside of the direct control of the project sponsors, such as an intersection that is not adjacent to a proposed BART station, then such impacts were examined and mitigations proposed, as required. If off-site mitigation in the comment refers to mitigating traffic impacts to Highway 101 by proposing transportation improvements (other than directly to Highway 101), then such improvements were suggested. Improved transit feeder service to the end-of-line BART station was suggested, though it was stated in the DEIR/SDEIS that such transit service enhancements would not likely lead to reduction of the impact to an insignificant level.

- 14.6. The Draft EIR/SEIS analysis and mitigation program are sufficiently vague and...since the "project" has not yet been selected, we would hope that you will extend the 30 day review period for the Final EIR/EIS. This would give those of us affected by your final choice adequate time to work with your staff to insure that the identified impacts are appropriately addressed in the mitigation program.

**Response.** The selection of the Alternative VI LPA was made by the BART and SamTrans Boards in April 1995; the selection of the Alternative VI Aerial Design Option LPA was made in September 1995. A final decision on a project will not be made until after release of the FEIR/FEIS. With respect to a review period once the FEIR/FEIS is released, there will be a 10-day period between the release of the FEIR/FEIS and the hearings before the BART and SamTrans Boards to certify the EIR and approve a project. With respect to the EIS, there will be a 30-day period after publication of the availability of the FEIS in the Federal Register during which the public and other agencies can comment on the final EIS prior to the FTA's final decision on the project.

- 14.7. The proposed BART alternatives fail in 13 of...23 objectives. The TSM alternative will fulfill all the goals and objectives. Please address in the framework of the proposed objectives why a BART extension should have priority over the TSM alternative.

**Response. Project Goals.** Table 14.7 compares the DEIR/SDEIS alternatives and design options against the project goals established by MTC and its regional partners. The alternatives and design options are ranked either "high," "medium," or "low," depending on how well each alternative achieved the project goals.

Low, medium, and high rankings are defined as follows:

- Low - alternative is least effective at fulfilling goals.
- Medium - alternative adequately fulfills goals.
- High - alternative most effectively fulfills goals.

The TSM Alternative is ranked "high" in one, "medium" in two, and "low" in six of the goals identified for the project. Alternative VI and the Aerial Design Option rank "high" in seven of eight goals and, therefore, best meet the goals established for the project. The 1992 LPA and its I-380 Least-Cost Design Option, Alternatives III, IV and V, and Design Option V-A ranked "high" in four goals; the No-Build and TSM Alternatives and Design Option V-B ranked "high" in two or fewer goals. Alternative VI and the Aerial Design Option LPA rank "high" in seven of eight goals.

**Table 14.7**  
**Evaluation of Alternatives Based on Goals and Objectives**

Goals and Objectives	No Build	TSM	Alternatives						Alt. VI LPA
			1992 LPA	1992 LPA-D.O.	Alt.III	Alt.IV	Alt.V	D.O. V-A	
GOAL 1 Objectives	Mobility. Provide a balanced transportation system that promotes the safe and efficient movement of people within the project.	low	low	high	high	high	high	high	high
	a) Relieve increasing congestion on the highway and street system by promoting alternatives to single occupant automobiles;	L	M	H	H	H	H	M	H
	b) Maximize the use of public transportation, particularly during peak commute periods;	L	L	H	H	H	H	H	H
	c) Develop a coordinated transit system that links local and regional transit systems;	L	M	H	H	H	H	H	H
	d) Design a system that accommodates a future BART extension to the south; and	L	L	M	M	M	M	M	H
	e) Design the system so that it satisfies BART/CatTrain/SFIA design, operational, and safety criteria.	N.A.	M	H	H	H	H	H	H
GOAL 2 Objectives	<i>Environmental Consideration.</i> Preserve and enhance the environment.	medium	medium	medium	low	low	medium	medium	high
	a) Support implementation of the Bay Clean Air Plan, aimed at attaining state and federal ambient air quality standards;	L	L	H	H	H	H	M	H
	b) Minimize potential adverse impacts to the corridor's natural resources, particularly wetlands and habitat for identified endangered species;	H	L	L	L	L	M	M	H

Table 14.7  
Evaluation of Alternatives Based on Goals and Objectives  
(continued)

Goals and Objectives	No Build	TSM	1992 LPA	1992 LPA-D.O.	Alternatives				D.O. V-A	D.O. V-B	Alt. VI LPA
					Alt. III	Alt. IV	Alt. V	Alt. VI			
GOAL 3	c) Minimize potential adverse impacts to the built environment; and d) Minimize exposure to natural hazards.	H	H	M	L	L	M	L	M	H	H
Objectives	<i>Land Use and Development</i> Develop a transportation system in the project corridor that is integrated with adjacent land uses and with planned development	H	M	M	M	M	M	M	M	M	M
	a) Provide a transportation system that will encourage private investment and commercial activity in existing and planned activity centers;	low	low	medium	medium	low	low	medium	medium	medium	high
	b) Minimize to the maximum extent possible displacement and disruption of existing land uses;	L	L	M	M	L	M	M	M	H	H
	c) Minimize disturbances to neighborhood character resulting from significant changes in traffic flow, introduction of facilities that are out of scale with existing development, loss of important social or recreational facilities, and disruption of well-defined pedestrian areas.	H	H	M	M	L	L	L	L	L	L
GOAL 4	<i>Financial Feasibility</i> . Develop transportation systems based on a realistic estimate of available resources.	high	high	medium	medium	medium	medium	medium	medium	medium	medium

Table 14.7  
Evaluation of Alternatives Based on Goals and Objectives  
(continued)

Goals and Objectives	No Build	TSM	1992 LPA	1992 LPA-D.O.	Alt. III	Alt. IV	Alt. V	Alternatives		D.O. V.B	Alt. VI LPA
Objectives	a) Develop a transportation system that can be funded by the parties sharing the costs; and	H	H	M	M	M	M	M	M	M	M
	b) Investigate opportunities to identify low-cost options in the development of transportation facilities.	N.A.	H	M	H	M	M	M	M	M	M
GOAL 5	<i>Equity.</i> Design a transportation system that meets the needs of all social groups, particularly the poor, elderly, disabled, young, and other transportation disadvantaged.	low	low	high	high	high	high	high	high	high	high
	a) Increase the mobility of the transportation disadvantaged; and b) Seek a fair distribution of costs and benefits among various social groups.	L	L	H	H	H	H	H	H	H	H
GOAL 6	<i>Community and Institutional Considerations.</i> Maximize community acceptance and political and institutional support of the project.	N.A.	M	M	M	M	M	M	M	M	M
	a) Provide transportation solutions consistent with federal, state, regional and local goals and objectives to the greatest extent possible; and b) Provide for a participation process in the development of transportation plans that is open and understandable to the general public.	low	medium	medium	medium	medium	medium	medium	medium	medium	high

Table 14.7  
Evaluation of Alternatives Based on Goals and Objectives  
(continued)

Goals and Objectives	No Build	TSM	Alternatives				D.O. V.A	D.O. V.B	Alt VI LPA
			1992 LPA	1992 LPA/D.O.	Alt. III	Alt. IV			
GOAL 7	<i>Effectiveness.</i> Provide an effective addition to the regional transit system.	low	high	high	high	high	high	medium	high
	a) Provide intermodal connection between various transit modes, e.g., BART, SamTrans, CalTrain;	L	M	H	H	H	H	H	H
	b) Develop transit alternatives that are convenient for passengers; and	L	L	M	M	M	M	M	H
	c) Maximize transit patronage.	L	L	H	H	H	H	M	H
GOAL 8	<i>Operational Efficiency.</i> Provide an efficient transit system.	low	high	high	high	high	high	medium	high
Objectives	a) Minimize travel time; and b) Provide for efficient transit operations.	L	L	H	H	H	H	M	H
		L	L	H	H	H	H	M	H
GOAL SUMMARY	low	med/ low	high/ medium	medium	high/ medium	high/ medium	high/ medium	medium	high
GOALS totals	H 1 M 1 L 6	H 1 M 2 L 5	H 4 M 4 L 0	H 4 M 3 L 1	H 4 M 2 L 2	H 4 M 3 L 1	H 4 M 4 L 0	H 2 M 6 L 0	H 7 M 1 L 0
OBJECTIVE SUMMARY	H 6 M 0 L 13 N.A. 4	H 11 M 7 L 7 N.A. 0	H 11 M 11 L 1 N.A. 0	H 12 M 9 L 2 N.A. 0	H 11 M 6 L 5 N.A. 0	H 11 M 8 L 4 N.A. 0	H 10 M 11 L 2 N.A. 0	H 6 M 16 L 1 N.A. 0	H 17 M 4 L 1 N.A. 0

Sources: 1. AA/DEIS/DEIR, March 1992.

Footnote: a. Measures: Low/Medium/High

It is clear from the ranking that Alternative VI and the Aerial Design Option LPA best meet the goals established for the project.

**Mobility.** All of the BART build alternatives are ranked "high" in providing safe and efficient movement of people within the project corridor. The No Build and TSM Alternatives do not meet this goal. **Environmental Considerations.** Alternative VI (with the Millbrae tunnel construction laydown area option) is superior in preserving and enhancing the natural environment, particularly with regard to preservation of wetlands and endangered species. Construction of any alternative requires approvals by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), and the U.S. Environmental Protection Agency (EPA) because of potential impacts to endangered species. Based on the comment letters and informal consultation, the CDFG recommends Alternative VI as the Least Environmentally Damaging Practicable Alternative (LEDPA). USFWS, CDFG, Army Corps of Engineers, and EPA have some authority to direct agencies to construct the LEDPA, as avoidance of impacts to endangered species and wetlands is a requirement of these agencies in order to obtain permits essential for construction. The CDFG commented that alternatives that have an intermodal transit station west of Highway 101 (the 1992 LPA, and its Least-Cost I-380 Design Option, TSM, and the Alternative III) would probably result in loss and disruption to prime habitat for the San Francisco garter snake, an endangered species. Alternatives IV and V, with intermodal facilities in Millbrae, are considered to have some impacts to prime habitat, as would Design Options V-A and V-B. The Aerial Design Option LPA is ranked "high" in meeting three of the four objectives listed in Table 14.7. Overall, it is ranked "medium" in the goal of environmental considerations because of its disruption to prime habitat for the San Francisco garter snake, an endangered species, west of Highway 101. Mitigation strategies will be advanced to address these considerations, with appropriate review and approval by the resource agencies.

**Land Use and Development.** The 1992 LPA and the I-380 Least-Cost Design Option subway alignment through the cemetery area in Colma, and its proposed subway alignment at Hickey Station in the City of South San Francisco, minimize disturbances to neighborhood character and are integrated with adjacent land uses and planned development in these areas. The I-380 Least-Cost Design Option subway or aerial bypass of downtown San Bruno would displace approximately 120 residences and fragment the Fifth Addition. Based on this information, the 1992 LPA and its I-380 Least-Cost Design Option are rated "medium" for this goal.

The No Build and TSM Alternatives would meet the objectives of minimizing displacements and disruption to the existing land uses but would not meet the goal of providing a transportation system that is integrated with adjacent land uses and planned development. The Alternative III retained cut alignment through Colma and South San Francisco and aerial alignment through downtown San Bruno is rated "low" because it would disturb the neighborhood character and conflict with the general plans of Colma, South San Francisco, and San Bruno. The Alternative IV aerial alignment along San Bruno Avenue introduces a physical barrier through the Belle Air neighborhood, and the Millbrae Intermodal Station at Center Street isolates the Marino Vista and North Millbrae neighborhoods and is rated "low" in integration with adjacent land uses.

Alternative V is rated "low" in integration with adjacent land uses because the I-380 or Downtown San Bruno Stations would impact the Belle Air neighborhood in San Bruno, and the Millbrae Intermodal Station at Center Street would isolate the Marino Vista and North Millbrae neighborhoods. For Design Options V-A and V-B, I-380 or Downtown San Bruno Stations would impact the Belle Air neighborhood; however, both are consistent with development plans and therefore are rated "medium" in achieving the goal. Alternative VI and the Aerial Design Option LPA are consistent with Colma, South San Francisco, and San Bruno plans. In addition, the Aerial Design Option LPA is consistent with Millbrae's Station Area Concept Plan, while Alternative VI is not. The Aerial Design Option LPA effectively integrates the BART station into the Airport Master Plan, which Alternative VI does not. The Alternative VI and the Aerial Design Option LPA are rated "high" for this goal. Overall, the Aerial Design Option LPA is rated best for achieving the goal of integration with adjacent land use and planned development.

***Financial Feasibility.*** The No Build and TSM Alternatives achieve a "high" rating for financial feasibility, whereas the BART build alternatives except Alternative VI show a "medium" rating on achievement of this goal. The No Build and the TSM Alternatives are identified as low-cost proposals, and funding assumptions are reasonable for these options. The BART build alternatives' capital cost estimates include a number of low-cost design options (at-grade construction as opposed to tunneling, the I-380 Least-Cost Design Option, limited station footprints, etc.). Alternative VI ranks "medium to low" on financial feasibility. The Aerial Design Options compared to Alternative VI reduce estimated costs of the Alternative VI LPA by approximately \$200 million. BART's consideration of the Aerial Design Option LPA resulted from a directive from the U.S. Congress House of Representatives Appropriations Committee to consider less expensive design options into SFIA and a resolution passed by the Metropolitan Transportation Commission requesting BART identify and implement a feasible cost containment strategy for the BART extension. The Aerial Design Option LPA satisfies the recent congressional directive to reduce project costs. The reduction in costs also makes it unnecessary to seek sources of funding other than those already identified. Implementation of the financial plan will require the concerted cooperation of all involved parties.

***Equity.*** Each BART build alternative ranks "high" in terms of meeting the overall goal of providing a transportation system that effectively meets the needs of all social groups, despite the fact that the implementation of these alternatives would have a disproportionate impact on low-income neighborhoods. The No Build and TSM Alternatives were rated "low" for achieving this goal.

***Community and Institutional Considerations.*** Overall, Alternative VI and the Aerial Design Option LPA are rated "high" on community and institutional considerations. They have by far the greatest community and institutional support. Daly City, Colma, South San Francisco, San Bruno, and Millbrae have all passed resolutions in support of Alternative VI, with certain design modifications. On July 25, 1995, the San Francisco Airports Commission resolved that "the location for a Airport BART station shall be in front of the planned International Terminal. The Aerial Design Option LPA is the only alternative which is consistent with this resolution.

The Aerial Design Option LPA incorporates Passenger Service Quality Standards for the BART-San Francisco Airport Extension adopted by the BART Board of Directors on September 12, 1995 and by the San Francisco Airports Commission on September 19, 1995.

The Aerial Design Option LPA is the only alternative that would satisfy all of the Passenger Service Quality Standards adopted by the BART Board of Directors and the Airports Commission. The location of the BART Airport station under the Aerial Design Option LPA would be in front of the west entrance at the departure level of the new International Terminal. At least 50 percent of passengers arriving on BART would be able to reach the first ticket counter at their selected airline terminal location from the midpoint of the BART platform within a four to five minute walk without transfers. Moving sidewalks would be added inside the International Terminal to the North Terminal (United Airlines) and additional elevators and escalators would be added to facilitate passenger convenience. In addition, BART baggage check-in would be provided at both ends of the BART platform, as would access to the LRS, one level above the BART station via escalator or elevator. Appropriate architectural treatment and fully integrated graphics and signage to provide a user-friendly atmosphere would be incorporated during final design.

The City of Burlingame opposes Alternative VI and the Aerial Design Option LPA and supports instead the TSM Alternative, with a new San Bruno CalTrain Station west of Highway 101 connected to the proposed Airport by the Airport Light Rail System.

The 1992 LPA and Alternative III Tanforan Station were opposed by the City of San Bruno and the Tanforan Park Shopping Center during the Alternatives Analysis process. Alternative III, with retained-cut alignment through Colma and South San Francisco and an aerial alignment through downtown San Bruno, was opposed by Colma, South San Francisco, and San Bruno at the conclusion of the Alternatives Analysis study. There was significant San Bruno Belle Air

neighborhood opposition to the I-380 and Downtown San Bruno Station options under Alternatives IV, V, V-A and V-B. The Millbrae City Council opposed the Millbrae Intermodal Center Street Station under Alternatives IV and V.

**Effectiveness.** All of the BART build alternatives, except Design Option V-B, are rated "high" in providing effective additions to the regional transit system. Design Option V-B is rated "medium," or only adequately satisfying this goal, because it would have the lowest patronage of the BART alternatives and the longest connection to the Airport via the ALRS from either downtown San Bruno BART Station. Both the No Build and TSM Alternatives are ranked "low" in satisfying this goal.

**Operational Efficiency.** All of the BART build alternatives are rated "high" in providing an efficient transit system. Overall, the Aerial Design Option LPA is rated "highest" for this goal because it provides the highest level of passenger convenience for airport-destined patrons. Of all the BART build alternatives, walking distance to SFIA International Terminal from BART would be shortest under the Aerial Design Option LPA. It also provides direct service between Millbrae and stations north of San Francisco Airport, without requiring all trains to travel throughout the Airport. The No Build and TSM Alternatives do not achieve this goal.

- 14.8. Correction to public participation: Burlingame and BART held an open house on June 29, 1994 which was not included in the public input section of the Summary document.

**Response.** The open house held on June 29, 1994, was hosted by the Burlingame City Council. Although BART did not schedule or organize the open house, BART was invited to participate, and attended.

- 14.9. In describing tail/turnback track in Alternative VI the overall length seems to vary throughout the report....Since the city has recently approved a congregate care facility for the elderly and a residential condominium in the block bounded by California, rear of the lots facing Dufferin, El Camino and Trousdale, a longer tailtrack could have a substantial effect.

**Response.** The proposed tail/turnback track behind the Millbrae Station under Alternative VI and the Aerial Design Option LPA has been designed to extend no farther than 1500 feet into the City of Burlingame, a figure used consistently in the report. (Some confusion may arise because the overall length of the tailtrack is about 2200 feet, with 700 feet in Millbrae and 1500 feet in Burlingame.) Under the Aerial Design Option LPA, a visual barrier wall is included in the design.

- 14.10. Why does the TSM alternative assume no CalTrain extension to downtown San Francisco?

**Response.** The TSM Alternative with the CalTrain downtown extension was analyzed in the AA/DEIS/DEIR, published in 1992. The modeling assumptions used to model the TSM Alternative with the CalTrain Downtown Extension are consistent with the modeling assumptions used to model all of the alternatives in the DEIR/SDEIS and the FRDEIR/S#2DEIS. Please refer to Response 11.6 for a discussion of the CalTrain downtown extension.

- 14.11. How would addition of this extension downtown affect the ridership, cost effectiveness and competitiveness of the TSM alternative with all the BART alternatives or the selected project?

**Response.** A DEIR is currently being produced for the proposed CalTrain extension. At completion of this effort a comparison will be possible between capital costs and cost effectiveness of the two proposed projects.

The TSM Alternative, with inclusion of the CalTrain Downtown Extension, was studied in the AA/DEIS/DEIR and is listed as Alternative 2B, while the TSM Alternative without the CalTrain Extension is listed as Alternative 2A. Chapter 6 in the AA/DEIS/DEIR includes a section on

Transportation System Effectiveness that states that regional transit person trips would increase by 9,700 new transit trips under the Base Case Alternative, (which included the CalTrain Downtown Extension), compared to Alternative 2B which did not. The costs associated with Alternative 2B are presented in the Assessment of Costs of the Alternatives section of Chapter 6 in the AA/DEIS/DEIR. Results of cost effectiveness estimates are presented in Table 6.22 in the AA/DEIS/DEIR, though the TSM Alternatives is used as the basis of comparison for the BART build alternatives.

For a discussion of the ridership impacts of the CalTrain downtown extension, please refer to Response 11.6.

- 14.12. Does not identify any improvement to Millbrae interchange if Alternative VI is used. How will the capacity of the interchange and roadway (Millbrae Avenue) to El Camino Real be affected? Will this affect the intersection and access to the Rollins Road industrial area?

**Response.** The intersection of Millbrae Avenue and Rollins Road would be improved under Alternative VI and the Alternative VI Aerial Design Option and it would operate at acceptable levels of service with the Millbrae Avenue Station. Please refer to Response 6.6 for a discussion of the El Camino Real and Millbrae Avenue intersection, to Response 10.15 for further discussion of the Millbrae Avenue and Rollins Road intersection, and to Response 10.17 regarding the Millbrae Avenue interchange.

- 14.13. How would bus service to the Millbrae station in Alternative VI affect the El Camino/Millbrae intersection service level, turning movement, access to Burlingame?

**Response.** Bus trips and turning movement for buses were incorporated in analyzing the El Camino Real/Millbrae Avenue intersection by counting buses as more than one vehicle and adding a turning penalty delay for buses.

These bus trips include added feeder service to the Millbrae Avenue Station under Alternative VI and the Alternative VI Aerial Design Option. Certain SamTrans trunkline service along El Camino Real was assumed to not detour to the Millbrae Avenue Station. Tables 3.1-8 through 3.1-10 of the DEIR/Technical Appendix identify traffic conditions for each of the alternatives with and without project implementation. Although not specifically called out, the levels of service for El Camino Real and Millbrae intersection include the movement of bus trips. Please refer to Response 6.6 for a further discussion of traffic-related impacts to the El Camino Real and Millbrae Avenue intersection.

- 14.14. The sensitive receptor analysis should address the effects of the system on riders i.e. massive stations, underground travel, crowding, etc. ([page] 2-89, Table 2.4-2 [of the DEIR/Technical Appendix])

**Response.** The phrase “sensitive receptors,” as used in visual impact analyses, refers to individuals who would be particularly affected by *changes* to the visual appearance and ambiance of their environmental setting. Residents in a neighborhood are the principal group likely to be affected by alterations in their setting. Issues raised by the commentator concerning transit riders’ perceptions of massive stations, underground travel, and crowding have more to do with their physical and psychological comfort than with visual impacts to the physical surroundings. Crowding and comfort are important criteria for measuring potential impacts for the transit user. The commentator is referred to Section 3.1.3 of the DEIR/Technical Appendix where transit impacts are discussed. Among the impacts considered are the effects of passenger facilities on the transit user.

- 14.15. Our understanding is that the current volume of passengers through SFIA is 32 million not 29.9 million....Does the low estimation of this number put the current employment number used in the analysis in question? (page 3.1-1 [of the Summary DEIR/SDEIS])

**Response.** The estimated employment forecasts for the SFIA used in the traffic analysis in the BART extension DEIR/SDEIS was based on information contained in the SFIA Master Plan EIR (1992). The statement in the DEIR/SDEIS on the current volume of passengers through the SFIA was provided for informational purposes under the existing conditions sections and does not reflect the 1993 employment number used in the traffic analysis.

The SFIA Master Plan FEIR states on page 19, "... in 1989, the SFIA terminal complex operated at 29.9 million annual passengers, near its design capacity. Passenger estimates for 1990, the base year, are essentially the same as those for 1989."

- 14.16. Analysis should address ridership in terms of competition of other modes available to public which might take less time or be more convenient, particularly for those living and working north of the airport. A new survey of airport employer/employee should be done for a more accurate estimation of airport demand/ridership. (page 3.1-3, Table 3.1-1 [of the DEIR/Technical Appendix])

**Response.** The mode choice model used by MTC to forecast choice of mode was based on the best information available at the time of the analysis. The availability of various modes for all persons in the Bay Area Region, including north of the SFIA, was an important component of MTC's mode choice model. Please refer to Response 14.15 for a discussion of airport employee estimates.

- 14.17. No numerical comparison between employee and passenger trips per day is included nor is there a differentiation between passengers who pass-through and do not leave the airport. This should be added to the analysis. ([page] 3.1-4, [Table 3.1-2 of the DEIR/Technical Appendix])

**Response.** Daily transit trips by air passengers as well as by workers and others to the SFIA are presented in Tables B-1, B-5, B-9, B-13, B-17, B-21, B-25, B-31 and B-37 in Appendix B of the DEIR/Technical Appendix. Air passengers who transfer from one flight to another, i.e., change airplanes, are not included in the analysis because they do not use ground transportation. These transferring air passengers may use the ALRS and were not included in the forecasts of ALRS patronage in the DEIR/SDEIS.

- 14.18. The original environmental document prepared for the selection of the Locally Preferred Alternative included a TSM alternative which extended CalTrain downtown in San Francisco. This analysis should be corrected, updated and included as part of the TSM Alternative II in this DEIR/SDEIS.

**Response.** Please refer to Response 11.6 for a discussion of transportation-related impacts to the BART extension with the CalTrain downtown extension.

- 14.19. Will the City and County of San Francisco Water Department right-of-way adjacent to the SP mainline/tailtrack be used in Burlingame? If so the relocated CalTrain rails will be closer to development on the west side of California and subject them to greater noise levels....These uses should receive noise mitigation. (page 3.1-5 [of the Summary DEIR/SDEIS])

**Response.** Since release of the DEIR/SDEIS and the FDEIR/S#2DEIS, the project proponents have continued to refine the alignment of the tracks in the vicinity of the Millbrae Avenue Station. The project proponents have selected an alignment that avoids use of the City and County of San Francisco Water Department right-of-way and shifting of the CalTrain tracks to the west.

- 14.20. Burlingame is not planning to run a bikeway along the tailtrack right-of-way. ([page] 3.1-6 [of the DEIR/SDEIS])

**Response.** Page 3.1-186, paragraph following last bullet, of the Summary DEIR/SDEIS is revised to clarify the information on planned bikeways in the project corridor as follows:

Each of the city's plans calls for a bikeway along the railroad right-of-way. The General Plans of South San Francisco, San Bruno, and Millbrae indicate a planned bikeway to run the length of the project corridor along the railroad right-of-way.

Please refer to Response 146.1 for a discussion of efforts for bike path development and see Volume I of the FEIR/FEIS for a general description of a proposed bike route utilizing BART right-of-way.

- 14.21. In discussing the intermodal station at Millbrae the document does not address trips generated by an intermodal shift from car to BART. The report states that the number of transfers between modes is the same regardless of location, is that true of end-of-line and car to BART transfers? (page 3.1-17 [of the DEIR/Technical Appendix]) The analysis should quantify the number of transfers from car to BART projected at the Millbrae Station.

**Response.** Transfers between auto to BART are addressed in tables on BART station entries and exits by access mode, including Tables B4, B-8, B-12, B-16, B-20, B-24, B-28, B-36 and B-40 in Appendix B of the DEIR/Technical Appendix. These tables include auto access to BART for park and ride as well as park-and-kiss. The intermodal transfers referred to on page 3.1-17 that do not vary substantially are between BART and CalTrain. The number of cars accessing the BART-San Francisco Airport Extension station do vary for different locations.

- 14.22. Before impacts can be determined, several issues need to be clarified in terms of assumptions and accurately quantified: besides transfers there are riders who are entering the system at various stations who will impact the surrounding communities (page 3.1-17 [of the DEIR/Technical Appendix]) and 96 percent of the average daily ridership of CalTrain will transfer to BART (Table[s] 3.1-5 and 3.1-3).

**Response.** Access to BART along the BART extension was determined in MTC's travel demand modeling analysis. For example, Table B-40, which has been revised and is included in Response 10.12, contains information on access to the station by mode, including auto, walk and transit under Alternative VI. Auto includes the categories of park-and-ride BART patrons, i.e., those who drive or are passengers in vehicles that are parked at the station, and kiss-and-ride patrons, i.e., those persons who are driven to the station and dropped off. The walk access includes pedestrians who walk from their origination point and bicyclists. The transit category includes BART patrons who access the station by bus, CalTrain, taxi or other private transit vehicle. The load factor for CalTrain under Alternative VI is that approximately 80 percent of northbound CalTrain riders south of the Millbrae Avenue Station would transfer to BART in Millbrae during the A.M. peak hour rather than the 96 percent stated in the comment.

- 14.23. The basis for the assumptions for the BART/CalTrain transfers should be documented. The assumptions appear to be high and are a substantial proportion of the projected ridership gained by Alternative VI. (page 3.1-26, Table 3.1-13 of the [DEIR/Technical Appendix]) If the transfer assumptions are accurate, what will happen to CalTrain service north of Millbrae?

**Response.** MTC's mode choice model determined patronage forecasts for the BART extension and the type of access to the BART station, including the number of CalTrain riders who transfer to BART. Assumptions on travel time, cost, demographic characteristics and other information were used in the modeling process to determine these forecast numbers. Travel time was a major factor used in the modeling process for choice of mode and route. CalTrain service was assumed in the BART extension DEIR/SDEIS to terminate at 4th and Townsend Streets for all northbound trains. Please refer to Response 16.137 for further discussion of CalTrain service north of Millbrae.

14.24. Parking at the Millbrae Station in Alternative VI will be very accessible to SFIA. What is to prevent regular airline passengers from taking advantage of free BART parking for their overnight trips? The mitigations should address this issue since its resolution could affect dramatically the amount of parking available for commuters at the Millbrae Station.

**Response.** Please refer to Response 10.10 for a discussion of BART efforts to discourage airline passengers from parking at BART stations.

14.25. BART planning for parking is based on 100 percent of an average day. How often, in the East Bay experience, is the average parking level exceeded?...We cannot determine parking impact on local streets and on adjacent land uses without knowing this information. ([page] 3.1-26 [of the Summary DEIR/SDEIS]) Since existing commercial as well as residential uses will be affected by spillover parking in Burlingame, additional effective mitigations need to be addressed in the Final EIR ([page] 3.1-28 [of the Summary DEIR/SDEIS]).

**Response.** BART's policy is to provide sufficient off-street parking and feeder bus service to meet the projected passenger access demand at all new stations. Mitigation Measure 2.1 establishes a monitoring program to determine when substantial spillover parking occurs. If spillover parking causes parking shortages on local streets, then a residential permit parking program could be implemented. These programs have been used successfully around BART stations and other activity centers in the Bay Area.

Designing infrastructure for an average day with 10 to 20 percent buffer for overflow is standard design practice. Parking lots at BART stations along the extension were designed for an average day plus a 10 to 20 percent reserve for days that exceeded the average. BART does keep a detailed data base on boardings and exits by station.

In order to determine how the weekday ridership (and therefore parking) fluctuates over the course of a year, the 1993 and 1994 weekday patronage at similar stations on the existing system were reviewed (e.g., San Leandro, Bay Fair, Hayward, MacArthur, Rockridge, Walnut Creek, Pleasant Hill, Concord, Daly City, El Cerrito Plaza, El Cerrito Del Norte). The variance between the average weekday patronage and maximum weekday average is less than 10 percent.

These average patronage figures are based on monthly weekday ridership volumes.

14.26. The document does not address the impact on the railroad spur into the Rollins Road area which presently exists within the 1500 foot area for the tailtrack. We have at least one major manufacturer who needs rail service from that line.

**Response.** Presently, the drill track is embargoed from use by SPTCo. Discussions with the PCJPB have indicated that installation of necessary switching at this location would conflict with operating criteria for CalTrain. If or when the drill track were placed into service before construction begins of the BART-SFIA Extension, the rail spur would need to be altered to allow freight service and avoid a significant impact.

14.27. With a station at Millbrae Avenue, how many additional trips will be generated on Trousdale Avenue between 280 and El Camino Real during the AM peak hour? Will these increased trips overlap with the start of school at Franklin and Burlingame Intermediate Schools and create a safety issue?

**Response.** The eastbound volume of traffic on Trousdale Avenue arriving at El Camino Real is approximately 900 during the A.M. peak hour under Alternative VI and the Alternative VI Aerial Design Option in the year 2010 which is approximately 50 more vehicles than under the No Build Alternative in same year. The peak hour was forecasted to be between 7:30 A.M. and 8:30 A.M. while the start of school is 8:30 A.M. For safety issues, please refer to Response 21.10.

- 14.28. How will the San Mateo County Congestion Management Plan (CMP) address the degradation of existing known critical intersections caused by Alternative VI....Currently C/CAG is discussing charging an "impact fee" to those developers....Will BART or SamTrans pay impact fees or pay directly to improve Broadway/El Camino Real (a part of the CMP system) so future local development is not limited because of the degradation of the level of service at El Camino Real and Broadway? ([Page] 3.1-7 [of the Summary DEIR/SDEIS])

**Response.** BART's enabling legislation states that BART's goal is to provide regional transit service; therefore, it is not within the scope of BART's authority to construct roadway and intersection improvements. However, BART will mitigate traffic and circulation impacts caused by the BART-San Francisco Airport Extension by contributing to off-site street improvements planned and constructed by the officials of the appropriate cities and to Caltrans, where applicable, that are commensurate with station related traffic. In addition, BART will make normal frontage improvements at each of the new station sites.

Please refer to Response 6.6 for a discussion of the intersection of El Camino Real and Millbrae Avenue. The analysis of the El Camino Real and Broadway intersection concluded that the BART extension would not have a significant impact at this location and thus no mitigation is required.

- 14.29. What effect would expanded SamTrans bus service to BART have on SamTrans' present service? How would this affect the travel times and costs of south county and coastal people now using SamTrans' express bus service to San Francisco?

**Response.** The modeling assumptions for estimating transit patronage on SamTrans service were that local bus routes would provide feeder service into BART extension stations while certain mainline and express bus routes would have longer headways than the current schedule. For example, bus route 5L, mainline service serving El Camino Real, would be reduced from the current 15 minute headway to 20 minute headways with the BART build alternatives. Another example involving service to south county residences is service on the 7B SamTrans route, which serves Redwood City to SFIA using arterial streets and then to San Francisco partially using the freeway, was reduced from 5 minute headways to 20 minute headways in the model. The load factor, the ratio of occupied to available seats, would remain the same on these routes compared to the no build condition because some previous bus patrons would access BART stations via CalTrain or automobile. The impact to coastal people using SamTrans buses would not change under any of the alternatives in the DEIR/SDEIS. The changes in SamTrans service to the coastal residences would occur with the opening of the Colma BART Station rather than with any of the proposed BART extension stations. Any changes to SamTrans routes must first be proposed and then discussed in public hearings held by SamTrans before such changes are implemented.

A full report on the modeling assumptions on SamTrans bus service was included in the Final Definitions of Alternatives, Task 5, Deliverable 7 published in August 1991 by MTC. This report was part of the AA/DEIS/DEIR and includes maps of the changes in SamTrans bus routes assumed for estimating transit patronage. Although this report was done for the AA/DEIS/DEIR, the same assumptions apply to the alternatives in the DEIR/SDEIS except that the bus routes serving the Airport Intermodal Station would be shifted south to serve the Millbrae Intermodal Station under Alternatives IV and V or to service the Millbrae Avenue Station under Alternative VI and the Alternative VI Aerial Design Option.

SamTrans fare levels were not assumed to increase as a result of service changes associated with the BART-San Francisco Airport Extension. The cost of SamTrans service changes were also assumed to be essentially the same as without the changes associated with the BART-San Francisco Airport Extension. Fare increases for SamTrans bus service are the responsibility of the SamTrans Board of Directors and include a public hearing process before such changes would be implemented.

- 14.30. More information on the relationship between the increase in traffic on 101 and the location of the BART station needs to be provided. Also ways to reduce the congestion on 101 at Milbrae

Avenue need to be addressed more specifically. Since BART is building the station which creates the on ramp capacity problem, why is Millbrae given the sole responsibility for corrective construction on the 101 on ramp? How will Millbrae pay for this improvement?

**Response.** The relationship between the change in traffic on Highway 101 and the location of BART stations is quantified in Tables 3.1-72, 3.1-74 and 3.1-76 of the DEIR/Technical Appendix, Freeway Level of Service for analysis years 1993, 1998 and 2010, respectively. BART would participate, as appropriate, in future improvements at the Millbrae Avenue Interchange of Highway 101. Impacts to the Millbrae Avenue Interchange with Highway 101 and possible improvements to this interchange are addressed in Response 10.17.

- 14.31. Alternative VI is going to affect 101 Broadway to Poplar but there is no indication in the report of the magnitude of change at the Broadway interchange. This could have a big effect on Burlingame since Broadway's capacity drives density decisions east of 101. The report proposes, as a mitigation, to extend a weaving lane from SFIA access to 1400 feet south of Millbrae Ave. How will this affect the Broadway interchange's function and capacity? ([page] 3.1-18 [of the Summary DEIR/SDEIS])

**Response.** The BART extension under Alternative VI will have minimal impact on the Broadway Interchange with Highway 101. The sub-area traffic model indicated that in the area of the Broadway Interchange for Highway 101, the net change in traffic movements under the Alternative VI LPA and the Aerial Design Option LPA would be primarily northbound and southbound trips on Rollins Road with approximately 120 vehicles northbound crossing Broadway in the A.M. peak hour and 40 vehicles southbound in the P.M. peak hour. This additional traffic does not cause a significant impact at the intersection of Broadway and Rollins Road. The model also revealed that BART-oriented vehicles on Highway 101 would stay on the freeway near the Broadway Interchange and exit the freeway at the Millbrae Interchange.

The proposed mitigation of extending the southbound weaving lane from the SFIA on-ramp is to the north side of the Millbrae Avenue Interchange, not south of this interchange. Further, this mitigation is not required under Alternative VI, but was proposed under the other BART build alternatives.

- 14.32. El Camino Real at Millbrae will decline from LOS D to E during the AM peak hour. There is no proposal to do anything about the reduction in service level (identified as an unavoidable impact). Who will pay the off site improvement fee to address future developer's capacity problems under CMP?...If traffic volumes on El Camino Real will change this substantially and no mitigation is offered, what will be the impact on El Camino Real at Trousdale, immediately to the south? ([page] 3.1-24 [of the Summary DEIR/SDEIS])

**Response.** Mitigation for the intersection of El Camino Real and Millbrae Avenue is discussed in Response 6.6. The impacts to El Camino Real and Trousdale intersection were analyzed in the BART extension DEIR/SDEIS without improvements to the El Camino Real and Millbrae Avenue intersection and no significant impacts were found to occur at El Camino Real and Trousdale in any of the three analysis years.

- 14.33. Under cumulative impacts for Alternative VI they note that there would be a significant impact on California and Broadway....What is the basis for this conclusion in terms of traffic counts and origin destination studies. How much is the increase due to capacity limitations at the Millbrae Interchange and redirection of northern Burlingame residential trips? ([page] 3.1-31 [of the Summary DEIR/SDEIS])

**Response.** The cumulative impacts to the intersection of California and Broadway are based on changes occurring under the No Build Alternative in the year 2010. The BART build alternatives do not significantly degrade operations at this intersection. The turning movements at all intersections analyzed under the 1993 scenario were validated against field counts at these

intersections conducted in March 1994. The growth rates applied to increase traffic at all analyzed intersections were based on information from MTC's travel demand forecasts, which in turn use ABAG's socioeconomic forecasts to project future growth rates.

- 14.34. The DEIR/SDEIS did not address the impacts of traffic changes on the intersections east of the freeway, such as Millbrae Avenue and Bayshore Highway or Broadway and Bayshore Highway; nor did they specifically look at the operation of the Millbrae and Broadway interchanges.

**Response.** The traffic modeling performed for analyzing impacts from the proposed BART extension included roadways to the east of Highway 101 as well as on- and off-ramps to the Millbrae Avenue and Broadway interchanges, but these specific volumes were not included in the DEIR/SDEIS. This is because the traffic volumes estimated for all the roadway links in the study area under all alternatives in all analysis years are too voluminous to include in either the Summary DEIR/SDEIS or the DEIR/Technical Appendix. However, the 4,000 pages of calculation sheets from the intersection level of service analysis under all alternatives in all analysis years are appendices to the Transportation Technical Report of the DEIR/SDEIS. Traffic related to the BART extension would not appreciably impact roadways to the east of Highway 101, i.e., Bayshore Highway, according to the travel assignments performed to determine specific routes taken.

The Broadway interchange with Bayshore Highway (Highway 101) would be used by very few vehicles accessing the Millbrae Avenue BART Station, and therefore, according to the traffic analysis, a significant impact would not occur under the Alternative VI LPA or the Aerial Design Option LPA. The intersection of Rollins and Broadway which includes the southbound off-ramp from Highway 101 was studied and results appear in Appendix C of the DEIR/Technical Appendix.

- 14.35. The DEIR/SDEIS lacks specific intersection data beyond the current status quo. Peak hour volumes are shown for the A.M. and P.M. peak hours of the intersections gathered in 1993 and 1994. No data is shown for the 1998 or 2010 comparisons. This data should be provided as should adequate back up data for the traffic conclusions.

**Response.** The calculations of the LOS for the 97 intersections in all alternatives for all analysis years and for A.M. as well as P.M. peak hours are provided as appendices to the Transportation Technical Report.

- 14.36. The document did not address the traffic and parking effects (impacts) of being an "end station" on the line. Correspondingly there were no appropriate mitigations for these impacts identified.

**Response.** End-of-the-line stations were modeled as such under each BART build alternative. The end-of-the-line station for the BART extension has two advantages over the Daly City Station. The first is that existing intersections in the vicinity of the proposed Millbrae Avenue Station were improved while new, proposed intersections in the station area were designed, in both cases, to accommodate the anticipated increase in traffic. This case differs from the Daly City Station where certain intersections in the vicinity of the station have capacity limitations due to surrounding developments that have prevented improvements. The second advantage is that the supply of parking at the end-of-the-line station has been designed to meet the anticipated demand. The increase in capacity as needed to surrounding intersections and the size of the parking facilities to accommodate the parking demand will mitigate the impacts for the end-of-the-line station.

- 14.37. The DEIR/SDEIS does not address the fact that all of the build alternatives will have a significant impact on the freeway from Millbrae Avenue south. This should be identified and quantified in terms of change from present and projected to 1998 and 2010.

**Response.** The change in traffic on Highway 101 under each BART build alternative is quantified in Tables 3.1-72, 3.1-74 and 3.1-76, Freeway Level of Service for analysis years 1993, 1998 and 2010, respectively, in the DEIR/Technical Appendix. Specific changes in freeway volumes between an alternative and the No Build Alternative is provided under the Analysis by Alternative portion of the Traffic Section of Chapter 3.1. For example, Table 3.1-93, Estimated Freeway Impacts, Highway 101, contains the change in volume and percentage change for Alternative VI compared to the No Build Alternative in 1993, 1998 and 2010.

- 14.38. The demand for "spillover" parking at each station should be quantified and the geographical area which would be affected identified in the case of each station in order to document the conclusion that neighborhood parking permits would reduce this off site parking to insignificant levels. ([page] 3.1-167 [of the DEIR/Technical Appendix])

**Response.** Spillover parking cannot be quantified at the present time because the parking supply would be adequate to meet the anticipated demand. BART's policy is to provide sufficient off-street parking and feeder bus service to meet the projected passenger access demand at all new stations.

Mitigation Measure 2.1 establishes a monitoring program to determine when substantial spillover parking occurs. If spillover parking causes parking shortages on local streets, then a residential permit parking program could be implemented. These programs have been used successfully around BART stations and other activity centers in the Bay Area. Patrons who choose to park in a designated Residential Permit Parking area would incur substantial penalties and fines. This program would operate as an effective deterrent in preventing spillover parking.

- 14.39. The DEIR/SDEIS did not address the change in traffic volumes or level of service for the following intersections which concern the City of Burlingame: Broadway/Rollins, Broadway/California, Broadway/El Camino Real, Trousdale/El Camino Real, Murchison/El Camino Real, Millbrae Avenue/El Camino Real, and Millbrae Avenue/Rollins Road.

**Response.** These intersections were analyzed and included in the DEIR/Technical Appendix. In Table 3.1-70 of the DEIR/Technical Appendix, Broadway/Rollins is listed as intersection number 135, Broadway/California is intersection 134, Broadway/El Camino Real is 133, Trousdale/El Camino Real is 130, Murchison/El Camino Real is 127, Millbrae Avenue/El Camino Real is 72 and Millbrae Avenue/Rollins is listed as number 80. The level of service for these intersections as well as the other intersections analyzed are contained in Appendix B of the DEIR/Technical Appendix, specifically Tables B-3, B-7 and B-13, which contain all intersections analyzed for all alternatives for analysis years 1993, 1998 and 2010, respectively.

- 14.40. The DEIR/SDEIS shows that from Alternative VI there will be no impact at all on the Rollins Road/Millbrae Avenue intersection. We seriously question this finding since Rollins Road is shown as the entrance to the proposed BART parking structure and parking lot for the Millbrae intermodal station, the Millbrae station is the end station in this alternative, and this intersection also provides a primary truck access to the Hillsdale Industrial Area of Burlingame

**Response.** Please refer to Response 10.15 for a discussion of the intersection of Millbrae/Rollins under Alternative VI.

- 14.41. Currently many employees in Burlingame use Rollins Road to Millbrae Avenue to gain access to the freeway (101). If the capacity of this access is very congested the only other outlet is Rollins Road/Broadway. This intersection has serious capacity problems presently. If the congestion were to increase here it would have serious effects on the Broadway and California intersection. The DEIR/SDEIS does not include information about the A.M. or P.M. traffic volumes other than the existing situation, so these impacts are not quantified or addressed in mitigations.

**Response.** The intersections of Rollins/Broadway and Broadway/California were analyzed as described in Response 14.39. The BART extension would not add a significant amount of traffic to either of these two intersections. The southbound movement on Rollins Road through the intersection with Broadway is not the critical movement that constrains the capacity of this intersection.

- 14.42. The Millbrae redevelopment plans for Rollins Road should be addressed in the traffic projections for adjacent roadways and intersections and environmental impacts should be considered since the development would not exist without BART. This could be included in the cumulative impacts; mitigations should be identified.

**Response.** Growth in population and employment in the vicinity of the Millbrae Avenue Station was based on forecasts from ABAG as used by MTC. If the reference to the "Millbrae redevelopment plans for Rollins Road" is referring to the City of Millbrae's Millbrae Avenue Station Area Concept Plan, please note that this conceptual plan has not been incorporated in the traffic projections on the grounds that such plans are currently speculative. This redevelopment plan is separate from a BART extension and will require separate environmental analysis.

- 14.43. What effect will BART's extension to the Millbrae Station (Alternative VI) have on the number and frequency (headways, peak hour and otherwise) of CalTrains? ([page] 3.9-17 [of the Summary DEIR/SDEIS])

**Response.** The assumptions made in the DEIR/SDEIS on CalTrain service characteristics under Alternative VI are contained in Table 3.1-62, Alternative VI, Transit Operator Service Characteristics of the DEIR/Technical Appendix. Further, CalTrain is assumed to increase the number of trains from 60 per day under the No Build Alternative to 86 trains under the TSM and BART build alternatives. This increase in CalTrain service would increase the frequency of trains and reduce the headway between trains.

- 14.44. The DEIR/SDEIS should consider the impact of the BART extension and the impact of the airport expansion together. This cumulative analysis should be added to the document.

**Response.** The cumulative effects of the proposed BART extension and the SFIA expansion program are considered in the DEIR/Technical Appendix and in the Summary DEIR/SDEIS. The SFIA Master Plan is specifically identified on page 3-2 of the DEIR/Technical Appendix as one of the key projects in the project corridor whose impacts could cumulate with those of the BART-San Francisco Airport Extension. Within each environmental issue (i.e., land use, geology, air quality, etc.), cumulative effects are presented after the project-specific impacts, for each alternative. See also pages 4-21 to 4-23 of the DEIR/Technical Appendix for a summary of cumulative impacts.

- 14.45. The City's General Plan was adopted October 20, 1969 by resolution 87-69. The General Plan was last amended with the Housing Element in 1994. (page 3.2-7 [of the Summary DEIR/SDEIS])

**Response.** Page 3.27-7 of the Summary DEIR/SDEIS and page 3.2-31, paragraph three, sentence one of the DEIR/Technical Appendix, are revised to correctly reflect the City of Burlingame's adoption of, and most recent update to, its General Plan as follows:

The Burlingame General Plan was approved in 1968 and last amended in the mid 80s adopted on October 20, 1969 by Resolution 87-69 and last amended with the Housing Element in 1994.

- 14.46. Under Land Use Patterns it should note that as a part of implementing the recently adopted 1990-97 Housing Element an overlay zone allowing high density residential development has been

placed along the west side of California Drive (facing the CalTrain right-of-way) from the rear of the single family lots facing Dufferin to the Millbrae/Burlingame city line at Magnolia. The tailtrack would parallel much of this area (from the city line to south of the "T" intersection with Trousdale). ([page] 3.2-7 [of the Summary DEIR/SDEIS])

**Response.** The text is modified to reflect the fact that Burlingame has created an overlay zone. On page 3.2-32 of the DEIR/Technical Appendix, the following paragraph is inserted after the first carryover paragraph under Table 3.2-8:

In implementing the recently adopted 1990-97 Housing Element, the City of Burlingame created an overlay zone allowing high density residential development along the west side of California Drive from the back of single family lots facing Dufferin to the Millbrae/Burlingame city line at Magnolia.

- 14.47. A mitigation should be included which hides the tailtrack behind a berm or places it underground. If bermed it should be the length of the tailtrack and of sufficient height to reduce sound transmission and screen the view of BART rolling stock.

**Response.** The DEIR/SDEIS investigates visual and noise impacts related to the tailtracks in Burlingame. The land uses along the tailtrack segment in Burlingame are neither visually nor noise sensitive. They are largely industrial and commercial uses. The DEIR/Technical Appendix describes the absence of significant impacts on pages 3.3-90, Impact 19, and 3.9-85, Impact 13. Based on the information and assessment contained in the environmental document, mitigation is not required along the tailtracks. However, the design of the Millbrae Avenue Station and Burlingame tail track was revised in the FRDEIR/S#2DEIS for Alternative VI and the Alternative VI Aerial Design Option. The Burlingame tailtrack now includes south of Murchison Drive a wall between the CalTrain tracks and California Drive.

- 14.48. What will be the overall height of the parking structure and light standards at the Millbrae Station? Since the end of the parcel is within 1,000 feet of the end of the runway, will these structures encroach into the FAA glide slope standards (40:1)? Will this affect the amount of parking that can be provided on the site? Will it affect public safety?

**Response.** The tallest structure at the Millbrae Avenue Station would be the four-level parking facility at an estimated 45 feet. The distance from the end of Runway 1R to this structure is about 1,400 feet. The portion of the Millbrae Avenue Station that lies within 1,000 feet of the end of the runway is dedicated to surface parking lots. There is a future possibility of adding another level to the surface lot, but that would raise the height of this parking area to 15 feet or less. Consequently, there are no structures within the threshold 1,000-foot distance that might interfere with FAA's glide slope standards. The FAA glide slope standards would not affect the number of parking spaces that could be provided at the station site.

- 14.49. The statement that since "there is no station in Burlingame and the majority of the city is built out, Alternative VI would be unlikely to have a significant economic impact on the city," is inconsistent since it is noted that development will be encouraged by BART to intensify around the BART stations. ([page] 3.2-54 [of the DEIR/Technical Appendix]) In addition, the impacts on the Plaza Shopping Center and Hillsdale Industrial areas immediately adjacent to the Millbrae station are not addressed. Nor is the impact on the other retail centers of Burlingame addressed. These effects should be addressed in the Final EIR/EIS.

**Response.** Intensification of development activity around BART stations requires city support and favorable market conditions. The lack of development around most 20-year old BART stations, despite BART's desire for station-related development, indicates that BART's encouragement is not a sufficient condition for land use intensification to occur. Vacant areas or areas designated for much higher intensities have the highest potential for station-related

development. Sites in the Hillsdale Industrial area may fall into this category. The existing retail areas and relatively high intensity medically related uses have less potential for redevelopment.

14.50. As "street scape" is defined in the DEIR/SDEIS, Alternative VI will be totally out of scale with the entire area. But this is not identified as an impact nor is mitigation proposed. The analysis should be clarified and impacts addressed. Also the document does not address how the replacement of the historic wood frame Millbrae CalTrain Station with a 2 block long, 4 story high BART station is consistent with the existing "street scape." The Final EIR should address and identify mitigation.

**Response.** Compatibility of the surrounding built environment (scale) with that of the turnback/tailtracks in Burlingame under Alternative VI is addressed in the DEIR/Technical Appendix. Storage for up to 60 BART cars would not be out of scale with the surrounding industrial land uses as described on page 3.3-90, Impact 19, Visual Quality.

Impacts to streetscape are not specifically addressed in the analysis of effects in Burlingame, since the streetscape along California Drive is not well defined or pedestrian oriented and CalTrain already exists. The tailtracks would be screened by existing Oleanders and trees which line the western side of the SPTCo right-of-way.

The Millbrae CalTrain Station would not be replaced by a BART station but would be shifted approximately 15 feet to the west of its present location (please refer to Response 6.23). Although the scale of the four-story BART station parking structure would be greater than that of the CalTrain station, it would be located approximately 1,000 feet to the north and would be visually separated by the Millbrae Avenue grade separation. The grade separation constructed by the City of Millbrae will raise Millbrae Avenue over the CalTrain tracks. Consequently, even without BART, the streetscape in the station vicinity would be altered.

14.51. The analysis does not address the visual impact of the project on Care West convalescent hospital located at the north-west corner of Trousdale and California. ([page] 3.3-14 [of the Summary DEIR/SDEIS])

**Response.** The DEIR/Technical Appendix addresses the visual impact of the project on the Care West Burlingame convalescent hospital on page 3.3-90, Impact 19. The Care West Burlingame convalescent hospital is greater than 60 feet from the tracks and is separated from the tailtrack by California Drive, a strip of Oleander and street trees, and CalTrain; thus, no significant impacts to this sensitive receptor would occur.

14.52. The visual analysis does not address whether there will be a change in long distance views from the developed hills above Millbrae BART station and tailtrack.

**Response.** To address long distance views from the hills above the Millbrae Avenue Station and tailtracks, the following text is added to page 3.3-89 Impact 15 after the first paragraph of the DEIR/Technical Appendix:

From higher elevations in the hills to the west, the Millbrae Avenue Station would be visible in the distance. The four-story garage and other station facilities would be noticeable and would introduce a new visual element out of character with the surrounding development. However, at this distance, the viewshed encompasses a large area and the garage structure would not dominate distant views.

14.53. BART/SamTrans were unaware of a new congregate care facility in Burlingame (1733 California) when doing the sensitive receptors analysis. The site might be affected depending upon the location of tailtrack and the use of San Francisco Water Department right-of-way. ([page] 3.3-18

[of the Summary DEIR/SDEIS]) The final EIR should expand the noise and visual studies to include this site.

**Response.** The congregate care facility in Burlingame at 1733 California Drive was not addressed because the building permit for it was issued on May 8, 1995, after the DEIR/SDEIS was released. Because the facility was not part of the existing environment, visual impacts to this care facility were too speculative to be assessed at the time the DEIR/SDEIS was prepared. The facility will be located between Trousdale Drive and Dufferin on the west side of the tracks. The tailtracks under Alternative VI would extend approximately 350 feet beyond Trousdale Drive and would be greater than 160 feet from the proposed congregate care facility. Page 3.3-26, paragraph five, sentence two of the DEIR/Technical Appendix, is replaced by the following paragraph:

A congregate care facility is proposed at 1733 California Drive between Trousdale Drive and Dufferin. This facility would also be located approximately 160 feet from the proposed BART alignments and thus, no visual impact would occur.

The effects of the BART tailtracks on the congregate care facilities are also discussed in Response 14.51.

- 14.54. The report uses a 60 foot separation to determine the limit of visual encroachment or light and glare. Burlingame has two sensitive receptors (both congregate care facilities for the elderly) which are about 100 feet removed from the tailtrack, less from a relocated CalTrain rail. Sixty feet seems very close. If this sixty feet is a standard assumption; what is its source and past use? How has it been field checked for adequacy after development has occurred? ([page] 3.3-18 [of the Summary DEIR/SDEIS]) Because of the sensitive nature of the use of these two sites, the visual impacts should be evaluated along with noise and vibration anyway.

**Response.** The 60-foot standard for determination of significant visual encroachment is based on urban design studies. At 60 feet, facial features are normally discernible and perception of loss of privacy and visual encroachment is experienced. This criterion was developed through empirical field studies which eliminates the need for a post-development field check. Other transportation studies in which this standard has been applied include the Metro Rail Project EIR/EIS for the Southern California Rapid Transit District, the Long Beach–Los Angeles Rail Transit Project for the Los Angeles County Transportation Commission, various San Diego trolley extensions for the Metropolitan Transit Development Board, and the Holly Street Grade Separation EIR for the City of San Carlos.

The congregate care facilities are more than 60 feet from the nearest BART track and the BART train speed would be very slow at the end of the track. Noise and vibration impacts for these sensitive receptors are addressed on page 3.9-85 of the DEIR/Technical Appendix. The discussion indicates no significant noise and vibration impacts would occur. Please refer to Responses 14.51 and 14.53 for a discussion of the congregate care facilities.

- 14.55. Since Burlingame has a strip of developed land within about 100 feet of the new BART facilities, how much of the BART car will be visible over the sound wall? Should the walls be higher, planted with vegetation, etc. to increase the visual screen and mitigate this impact? (page 3.3-45 [of the Summary DEIR/SDEIS]) The report should address the design, function and appearance of this wall specifically. Specific mitigations for visual impact should be included.

**Response.** The DEIR/SDEIS does not identify significant noise or vibration impacts in Burlingame under Alternative VI; thus, no sound walls are proposed. Although up to 60 BART cars would be stored along the 1,500 feet of tailtracks, no significant views or scenic resources would be altered. Sensitive receptors would not be significantly affected because the existing trees along the SPTCo right-of-way would screen views and receptors are greater than 60 feet from the proposed tailtracks. These discussions are provided on pages 3.3-33 and 3.3-45 of the Summary DEIR/SDEIS.

14.56. The document indicates that there will be no BART security present from 2 AM to 6 AM daily. Who will cover this time? If the local police have primary responsibility, what has been the past experience of the level of demand for service (how many person hours)? ([page] 3.5-1 [of the DEIR/SDEIS])

**Response.** BART currently provides around-the-clock police service on its existing system. The three shifts cover 6 AM to 4 PM, 3 PM to 10 PM, and 10 PM to 8 AM, as described in the Summary DEIR/SDEIS on page 3.5-8. It is not clear where the commentator obtained information that police would not be on duty between 2 and 6 AM. Please refer to Responses 14.57 and 16.2 for additional information on police activity.

14.57. The response time of BART's police department is 10 minutes and, in an emergency, seven minutes. Given this long response time, what has been the experience of adjacent jurisdictions in the East Bay in providing Police coverage? How many person hours will be required over how long a time? Do communities in the East Bay execute mutual aid agreements? Are such agreements inevitable even if a local agency is not willing to provide such assistance? BART sees local policing as an unavoidable effect. The report should address why BART does not provide financial assistance to local police agencies for this service. ([page] 3.5-5 [of the Summary DEIR/SDEIS])

**Response.** The existing demand for local police support to assist BART police may not be directly applicable to the proposed BART-San Francisco Airport Extension. BART proposes to increase its level of staffing and acquire additional equipment to improve its current response time for emergency and non-emergency calls. BART police will add 5 to 8 people (a minimum of 5 sworn officers and 1 community service assistant per parking structure) with the implementation of the BART extension. As a result of these efforts, BART expects quicker responses than the eight minutes for emergency calls and the 15 minutes for non-emergency calls that are reported in the Summary DEIR/SDEIS on page 3.5-8. As noted on page 3.5-11 of the DEIR/Technical Appendix, the experience of police departments in Daly City, Richmond, and El Cerrito, where BART service exists, has been one of increased calls for service, but not to the magnitude that additional staff or equipment have been required.

This assistance is mandated by the California Mutual Aid Agreement (CMAA) as described in Section 3.5, Community Services and Facilities, of the DEIR/Technical Appendix. This agreement is signed by BART and all local jurisdictions served by BART. The CMAA is an existing protocol whereby the local jurisdictions and BART agree to provide mutual police services should the need arise. The CMAA occurs on both regional and local levels. CMAA responses to site-specific crimes such as auto theft and burglary are handled informally by the particular local police jurisdiction and BART police on a case-by-case basis. Emergency response to regional emergency situations such as riots would be coordinated by the particular county's Office of Emergency Services (Sgt. Joe, 1994).

14.58. The Technical Appendix indicates that Police Departments would be expected to shift responsibilities to civilians on city staff and encourage neighborhood surveillance programs in order to meet the additional demands for service caused by BART. Analysis should be more precise about what the problems are going to be so effective local policing programs can be properly designed. Mitigations should identify funding assistance from BART for developing local programs and staffing to meet needs generated by BART.

**Response.** The primary types of calls for service received by BART are described in the Summary DEIR/SDEIS on page 3.5-8. The majority of the incidents are crimes against property (i.e., auto thefts and burglaries). Mutual aid is most frequently invoked in situations of medical emergencies or serious crimes requiring immediate responses.

14.59. It looks as if local fire departments are expected to provide primary response to fire emergencies for BART....What has been the experience of fire service agencies in other communities along the BART line? Estimated cost of time spent (number of calls annually) and person power? The

environmental document sees fire assistance as an unavoidable effect with no compensation to local agencies except that BART provides specialized equipment. Who pays to train the fire personnel on the equipment?

**Response.** The commentor is correct in observing that BART requests local jurisdictions to respond to emergencies, as part of the BART Emergency Procedures Policy Vital Fire Protection Equipment, Communications and Training Agreement. Emergencies requiring response from local fire departments are relatively rare, and the greatest demand on local services is the requirement to participate in BART fire training exercises. Fire departments in Daly City, Richmond, and El Cerrito, where BART service exists, were contacted regarding their experience. As reported in the Summary DEIR/SDEIS on pages 3.5-12 and 3.5-13, these departments experienced an increase in their responsibilities but not to the point that an increase in staff or equipment was warranted. Local jurisdictions cover the costs of these additional responsibilities.

Information collected since publication of the DEIR/SDEIS supports the conclusion that increases in calls for local fire and emergency medical services would be minimal under any BART build alternative, based on the experience of other communities served by BART stations. In the period from March to May 1995, emergency calls from the Richmond BART Station represented 0.0019 percent of the total calls received by the Richmond Fire Department. Calls from the El Cerrito Del Norte Station represented 0.0023 percent of the total calls received by the El Cerrito Fire Department in the same period (Davena, 1995).

- 14.60. The report also states that there will be an increase in emergency medical services....What sort of costs are we talking about, person power, time, number of calls? What response times might be expected? (page) 3.5-8 [of the Summary DEIR/SDEIS])

**Response.** Emergency medical services would be required occasionally and would need to be responded to by local fire, police, and paramedic services. Please refer to Response 14.59 for a discussion of BART emergency procedures.

- 14.61. The public facilities section does not address the impact of the project on the Burlingame drainage channel immediately to the east, and parallel, to the tailtrack. It also does not address the current storm drainage on California Drive which crosses the right-of-way to the drainage channel. How will these existing facilities be addressed during construction and after BART is built?

**Response.** The tailtrack construction would not result in disruption or alteration of the existing drainage channel in Burlingame. Construction would be within the right-of-way with access from just north of the drainage channel.

- 14.62. At least one of the city's major sewage collection mains crosses under the S.P. right-of-way in the vicinity of the project. Will it be affected? Will sewer service to many of Burlingame's residents be interrupted during construction? Who will pay for the replacement of the line and the temporary facilities during construction?

**Response.** The BART tailtracks in Burlingame would be constructed at grade, just as the existing CalTrain tracks are. Thus, minimal excavation would be required to construct tailtracks. If a subsurface utility is encountered during construction, BART will reinforce the utility line in place so that it can sustain the load applied by the tailtracks. The existing sewer piping will be protected during the BART construction. Therefore, no interruption of the existing sanitary sewer service is anticipated. If replacement of the line or temporary facilities is necessary, BART will bear the cost of the replacement work.

- 14.63. Who is responsible for issuing building permits and doing construction inspections? Are there reimbursements for city time invested in these activities or are they covered by building permit fees?

**Response.** BART is not subject to local building permits under the State Enabling Legislation. However, agreement with the City must be reached over the final design and reconstruction of City-owned utilities and facilities. The final design and construction documents will be prepared by BART's Design/Build Contractor for approval in accordance with the agreement prior to construction. Inspection of this work is at the City's option and cost.

- 14.64. In general the document acknowledges specifically that there will be localized soil erosion impacts where drainage ways are modified and significant erosion and sedimentation during the construction period. Specifically how would these affect Burlingame's drainage area on the adjacent creek/canal that tracks storm water to the bay? ([page] 3.6-9 [of the DEIR/Technical Appendix])

**Response.** The type of erosion described in the DEIR/SDEIS where drainageways are modified refers to cases where natural channels are enclosed in culverts, and the potential for erosion occurs at the interface of the culvert and natural channel. The existing canal, located adjacent to the proposed tailtrack in Burlingame, is improved and no significant modifications are anticipated. Therefore, no significant erosion is anticipated. Construction of the proposed tailtrack in this area does not involve any significant excavation. Therefore, erosion from earthwork is expected to be insignificant.

- 14.65. Does the San Francisco Garter Snake exist in the city drain adjacent to the proposed tailtrack? What about in El Portal Creek Canal? Was this area surveyed? ([page] 3.7-6 [of the Summary DEIR/SDEIS])

**Response.** The entire proposed corridor, including the El Portal Creek Canal, was surveyed in December 1990 and between January and May 1992. Additional focused surveys were conducted on the west of Bayshore parcel because of the known occurrence of the San Francisco garter snake (SFGS) and California red-legged frog. The SFGS or the California red-legged frog are not expected in the El Portal Creek Canal, which is a cement-lined canal with little suitable habitat for either of these sensitive species. There is very little if any suitable SFGS habitat in the immediate vicinity of the proposed BART tailtracks and thus the SFGS is not expected in this "drain."

- 14.66. Lack of impact on biological resources is one of the primary assets of Alternative VI; however the report does not address/evaluate the habitat quality or impact of the alternative on the adjacent drainage area in Burlingame and the creek/bay wetland to which the drainage area connects to. ([page] 3.7-11 [of the Summary DEIR/SDEIS])

**Response.** It is unclear what "adjacent drainage area" and "creek/bay wetland" the commentator is referring to. If the drainage is the El Portal Creek Canal, this area was surveyed as part of the entire corridor survey in December 1990 and between January and May 1992. Please also refer to Response 14.65 for a discussion of habitat quality.

- 14.67. Report discusses the fact that SFIA anticipates putting airport parking in the airport lands west of 101, in fact paving the area. How or where will SFIA provide the projected, needed parking if much of the area is "High Quality" wetlands? ([page] 3.7-7 [of the Summary DEIR/SDEIS]) How will cars gain access to the area? What impact will this have on Millbrae Avenue, Millbrae/Rollins road and Millbrae/El Camino Real?

**Response.** It is beyond the scope of this document to fully address the potential impacts of possible proposed actions by the SFIA on the west of Bayshore parcel. The design and associated impacts of any SFIA proposed action on the west of Bayshore parcel would require a separate EIR/EIS. The SFIA is currently consulting with the USFWS in an effort to develop a long term management plan for the west of Bayshore parcel that would provide for some development to occur on the site while preserving the viability of a SFGS population on the site.

- 14.68. The document [Summary DEIR/SDEIS] refers in several locations (page 3.7-12, for example) to replacement of protected/sensitive habitat area by recreating them elsewhere off-site. Where would this be? Has it been discussed with the Interagency Committee chaired by the Corps of Engineers? Has their policy on off site replacement changed?

**Response.** The preferred location for mitigation is onsite within the project corridor. However, if an agreement with the SFIA cannot be obtained, mitigation would have to occur offsite. BART has identified potential offsite mitigation areas in consultation with the resource agencies, which may include sites currently inhabited by the SFGS. Please refer to Response 41.20 for a discussion of mitigation sites. An offsite mitigation area will have to be approved by, and meet the policies and regulations of, the resource agencies. BART has been meeting separately with agencies that participate in the interagency committee. ACOE staff has indicated that this project did not need to be presented to the committee.

- 14.69. In the West of Bayshore parcel biological analysis (page 3.7-12 [of the Summary DEIR/SDEIS]) there are a large number of unknowns based on as yet undiscussed (or at least undisclosed) requirements of various regulatory agencies. How will this be dealt with in the environmental certification process? Do we have a similar problem with the drain in Burlingame?

**Response.** On behalf of the FTA, the project proponents have completed a formal Section 7 consultation with the USFWS, and the USFWS has issued a Biological Opinion on the proposed Aerial Design Option LPA (see Volume V in the FEIR/FEIS). The project proponents are also seeking from the CDFG a Section 2081 permit and/or memorandum of understanding indicating CDFG's agreement with Section 404 of the Clean Water Act. In addition, the USCOE has issued a Preliminary Agreement on the permit application for the proposed project and mitigation plan for wetland impacts in accordance with Section 404 of the Clean Water Act. The USCOE released a Public Notice and is now reviewing comments received on the Public Notice to determine if a Section 404 permit can be issued on this project at this time. The EPA, USCOE, and USFWS have all issued preliminary agreement letters, indicating their concurrence on the development of adequate mitigation measures. The project proponents have submitted an information package to the Regional Water Quality Control Board (RWQCB) on the project that the RWQCB is currently reviewing for a Section 401 certification. The project proponents will seek a Section 1601-03 Streambed Alteration Agreement from the CDFG.

The only known drainage in the Burlingame area that is in the near vicinity of the proposed project is the El Portal Canal, which will not be impacted.

- 14.70. The DEIR/SDEIS states that El Portal Canal will not be affected by tailtrack construction. This conclusion should be documented. Since this water way is in the 100 year flood plain and affected by tides for much of its lower reach, what is its current biological state and what means will be used to insure that its current condition is not degraded during construction and after?

**Response.** The El Portal Canal is a concrete-lined drainageway in the area of the proposed tailtracks. Its biotic habitat values are low. All construction access would be from the west and would avoid crossing the El Portal Canal. There would be little if any degradation to this canal during and after the project construction.

- 14.71. The applicant has proposed to create the replacement/off site biological mitigation before the project commences. Can this be done within a reasonable time frame? How? Has the negotiating process with the many regulatory agencies begun? If these permits were delayed how would it affect the timing of the construction of the tailtrack? ([page] 3.7-15 [of the Summary DEIR/SDEIS])

**Response.** BART, SamTrans, and the FTA have initiated and conducted formal consultations with the USFWS and CDFG and USCOE, RWQCB. Meetings and formal consultations have

occurred from October 1993 to March 1996. Please refer to Response 14.69 for further discussion of regulatory requirements.

Proposed onsite mitigation measures, such as a hydrologic study of the west of Bayshore parcel, habitat enhancement of seasonal wetlands in the southern portion of the west of Bayshore parcel, management of Cupid Row Canal tidal gates, a bullfrog abatement pilot program, and SFGS capture feeding program, would be conducted as habitat enhancement measures for the SFGS. These measures would, in general, be completed within a reasonable time frame. Programs such as the bullfrog abatement program would continue throughout construction and may become part of a regular maintenance and habitat management program on the west of Bayshore parcel.

- 14.72. Will the tailtrack design in Burlingame include stormwater catch basins and oil and water separators? Where will the drainage be directed? ([page] 3.7-17 [Summary DEIR/SDEIS])

**Response.** All significant environmental impacts relating to the Burlingame tailtrack design have been identified and mitigation proposed. Oil and water separators are not currently included in BART drainage facilities unless a given drain is associated with a maintenance yard or a similar facility where activities that generate oil occur. It is expected that any drainage from the site will be directed to the nearest stormwater facility, which may be the El Portal Canal.

- 14.73. Since the garage at the Millbrae station is less than 1,000 feet from the end of the runway, what will be cumulative air quality effects on patrons using the parking garage with the addition of 3,000 peak hour automobile trips, major traffic congestion on 101 and Millbrae Avenue, plus the exhaust from increased flights at the airport?

**Response.** The parking garage at the proposed Millbrae Avenue BART Station is approximately 3,000 feet from the end of Runway 1 R. Enhanced by the heat and turbulence of the jet exhaust stream, aircraft pollutant emissions would disperse to the extent that no significant effect on ambient pollutant concentrations would occur at the Millbrae Avenue BART Station. Similarly, pollutant emissions from vehicular traffic on Highway 101, approximately 1,500 feet from the Millbrae Avenue Station, would disperse to the extent that no significant effect on ambient pollutant concentrations would occur at the station. Please refer to Response 79.5 for a discussion of pollutant dispersion.

Local air quality in the vicinity of the Millbrae Avenue Station is addressed in the DEIR/Technical Appendix, Section 3.10. Vehicular pollutants of concern on a local scale are carbon monoxide (CO) and particulate matter (PM<sub>10</sub>). The analysis of local CO impacts in the vicinity of the station considered vehicular emissions generated at the intersections of El Camino Real/Millbrae Avenue and Rollins Road/Millbrae Avenue and at two proposed parking structures at the Millbrae Avenue Station. Predicted worst-case CO concentrations in the vicinity of El Camino Real/Millbrae Avenue, Rollins Road/Millbrae Avenue, and the two parking structures do not exceed federal or California ambient air quality standards under any BART design alternative in any year the project would be in service (1998 and beyond). Thus, the combined result of aircraft emissions, vehicular traffic on Highway 101, and local, station-related traffic would not result in significant cumulative air quality impacts.

No quantitative model for local PM<sub>10</sub> impacts has been approved by EPA. Total PM<sub>10</sub> emissions are less than under existing conditions for all alternatives. Consequently, no significant PM<sub>10</sub> impact is expected at the Millbrae station.

- 14.74. The DEIR/Technical Appendix (page 3.3-90) notes that the trees may be removed on the east side of the tailtracks. The trees on the east and west sides of the CalTrain right-of-way have been in place and acted as a buffer to adjacent residential, commercial and industrial uses for over 50 years. Many of these trees are protected by Burlingame ordinance. The Final EIR should address the retention of the trees on both sides of the right-of way. An arborist's report should be prepared and specific measures to be employed to protect and regain these trees during construction and

after should be identified in the mitigations. The City's Park Director should be consulted and his evaluation and recommendations included in the preparation of the mitigations.

**Response.** The DEIR/Technical Appendix acknowledges, in Impact 19 on page 3.3-90, that trees on the east side of the CalTrain right-of-way will need to be removed due to BART alignment requirements and safety and operational considerations. Through coordination with the City, as many mature trees as possible will be preserved in this area without compromising safety or operational considerations. Please refer to Responses 36.1 and 29.18 for discussion of tree removal and mitigation measures.

14.75. The report found existing groundborne vibration below perception threshold (65-70 dB) throughout corridor, but the report notes that ground vibration data is "not available" for Care West in Burlingame. ([page] 3.9-4, Table 3.9-1 [of the Summary DEIR/SDEIS] cont.) Since this convalescent hospital is a sensitive receptor and about 100' more or less from the proposed tailtrack (Alternative VI), the existing ground vibration and airborne noise levels should be measured....The blocks with frontage on California opposite the railroad tracks within the project area are undergoing change from office/commercial to residential and community facilities associated with Peninsula Hospital on the west side of El Camino. A significant change in ambient or point source noise levels could affect the direction of this change and the City's general plan and housing element.

**Response.** Currently, the only potentially perceptible vibration at Care West would be from CalTrain. However, other locations adjacent to the SP tracks indicate that CalTrain vibration is below the level of perceptibility (e.g., Site No. 19 of Table 3.9-2, page 3.9-10 of the DEIR/Technical Appendix), and therefore no ambient vibration data were taken at Care West. Under Alternative VI, Care West would be approximately 160 feet from the nearest BART track. The BART trains would be moving very slowly on the tailtracks creating little noise and vibration, especially at 160 feet away. The existing noise and vibration from CalTrain is much more substantial. Steady traffic on California Drive dominates the existing ambient noise, which is contributed to by noise from CalTrain and from jets at the airport resulting in an  $L_{dn}$  74 dBA. BART train noise would change the ambient noise level by less than 1 dBA.

14.76. The report notes ([page] 3.9-9 [of the Summary DEIR/SDEIS]) that additional noise work will be done for sensitive receptors when the final project is selected and the preliminary engineering design phase is undertaken. Since Care West and two current projects, a congregate care facility and a multifamily residential project, have recently been approved, they should be evaluated as sensitive receptors if Alternative VI or a tailtrack in Burlingame is a part of the selected project. This analysis should be added to the Final EIR.

**Response.** The noise and vibration analysis prepared for the DEIR/SDEIS indicates no significant impacts to existing or future receptors adjacent to the tailtracks in Burlingame. Development of new, noise-sensitive land uses such as a care facility or multifamily dwelling in the vicinity of the SP tracks would require noise studies under the Burlingame General Plan. Such studies would likely result in noise abatement requirements of the development to reduce noise from traffic on California Drive, CalTrain, and the airport.

14.77. The noise analysis did not describe in detail what activities would occur on the tailtrack. Some activities may create point source noise; other activities may increase the ambient noise level at different times of the day. This analysis is important particularly to the sensitive noise receptors located immediately adjacent to California Drive. This analysis should be included in the Final EIR/EIS.

**Response.** Train length adjustments for peak and off-peak service would occur in the Millbrae tailtrack area. A tailtrack is critical to the smooth operation of train flow and storage, as well as failure management. Midday and overnight train storage for up to 60 BART cars would be provided on the tailtracks section south of the Millbrae Station. The noise analysis did include

evaluation of impacts to all known sensitive receptors along California Drive. The conclusion was that there would be no significant noise impacts. The BART trains would move less than 25 mph in the tailtrack section and would be a minor noise source compared to other existing ambient noise sources (traffic on California Drive, CalTrain, jets).

- 14.78. BART agreed early on that they would not include a car wash or maintenance structures along or on the tailtrack in Burlingame. The DEIR/SDEIS should address the specific location of these facilities for Alternative VI, noting that they will not be on the tailtrack in Burlingame.

**Response.** The car wash facilities for BART for Alternative VI are not included as part of the tail/turnback tracks in Burlingame. These facilities are located north of the Tanforan Station as described in Chapter 2, project description. A small below-grade maintenance pit is required in Burlingame under one of the tracks in the turnback area for emergency inspection purposes. There are no above-grade buildings required for this operation.

- 14.79. Will the sound wall enclosing the BART tailtracks reflect the noise generated by the CalTrain on to the sensitive noise receptors to the west (convalescent hospitals and residential uses), thus increasing the noise impacts of the project?

**Response.** No sound wall is planned for the BART tailtracks because no significant noise impact is projected for operations on the tailtracks. Please refer to Response 66.143 regarding the reflection of sound off of sound walls.

- 14.80. Does the ambient noise baseline used to calculate noise increases from BART include CalTrain service at the present 60 trains per day, at 86 per day or some other number? ([page] 3.9-18 [of the Summary DEIR/SDEIS])

**Response.** CalTrain currently provides a service with a total of 60 trains a day. The existing ambient baseline noise level measured at receptors adjacent to the SP tracks in Burlingame includes the current CalTrain service. The ambient noise environment at these receptors also includes noise from traffic on California Drive, jets at SFIA, and more distant traffic on El Camino Real and Highway 101.

- 14.81. Is the presence of a sound wall at a given height included in the noise analysis for Burlingame? If so, what were the assumptions about this wall? ([page] 3.9-19 [of the Summary DEIR/SDEIS])

**Response.** No sound wall is projected to be needed in Burlingame under Alternative VI or the Aerial Design Option LPA because no significant noise impacts are indicated. However, under the Aerial Design Option LPA a visual wall would be constructed between the CalTrain tracks and existing CalTrain parking. Characteristics and effects of the landscape wall along the tailtracks are presented in the FRDEIR/S#2DEIS on page 3.3-2.

- 14.82. The construction schedule indicates that nine months is being set aside in the schedule to get permits from necessary agencies [page 3.13-6 of the Summary DEIR/SDEIS]. Does this nine months include those agencies reviewing habitat replacement and enhancement? Is this a reasonable expectation? If permits are not issued in a timely fashion, how will it affect the construction schedule, local impacts and mitigations, and CalTrain service?

**Response.** The estimated nine month time frame in which necessary permits will be obtained is an optimistic but reasonably achievable expectation. The resources agencies with jurisdiction over biological habitats may take considerable time to evaluate project impacts and proposed mitigation plans. In recognition of this process, however, consultation with these agencies has already begun to the extent possible at this stage of project design. Delay will impact the contract award date and all related impacts and mitigation measures. Please refer to Response 14.71 for further discussion of negotiations with resource agencies.

- 14.83. Burlingame's police department sits within 100 feet of the tailtrack; the main egress from the police facilities is off California which could be heavily impacted by construction access activity. How will BART coordinate and work with the city to deal with this problem?...Mitigations proposed seem inadequate and are not location specific.

**Response.** The DEIR/SDEIS acknowledges the restrictions on local circulation and emergency response during the construction period (see Section 13.7, Community Services, in Chapter 3). The proposed mitigation measure calls for BART and/or its construction contractor to develop a construction traffic management plan in consultation with local jurisdictions. Specifically, Mitigation Measure 10.2, Coordination of Vehicle Routes with Local Jurisdictions, in Section 13.2, Transportation, requires BART to have predetermined agreements with local authorities regarding haul routes; Mitigation Measure 3.1 in Section 13.3, Land Use, specifies that BART will work closely with cities to design and implement plans to minimize construction impacts; and Mitigation Measure 1.1, Early Coordination of Construction Plan with Local Jurisdictions, in Section 13.7, Community Services, mandates that BART inform local jurisdictions of construction plans and roadwork that will disrupt circulation. These measures are not location specific, and BART has not yet initiated these discussions. The plans that result from the consultations will be specific and identify particular streets to be used as detours and as haul routes, as well as techniques to minimize access restrictions where easy ingress and egress is imperative.

- 14.84. Construction is identified as having a significant and unavoidable effect on CalTrain riders and service (freight) (page 3.13-8 [of the Summary DEIR/SDEIS]). What will be the extent of the impact on CalTrain service during construction of BART? Will it affect the peak hour schedules or the length and/or spacing of trains? How will traffic on 101 and local arterials be affected? What about the critical intersections as identified in the CMP, will their service levels be affected during construction? What mitigations are proposed? (page 3.13-4 [of the Summary DEIR/SDEIS])

**Response.** CalTrain and SPTCo service will not be interrupted during construction of the BART extension. However, minor delays may be caused through the use of shoo-flies that will divert trains around construction areas. The length of these small delays will vary by the specific nature of the construction activities but are anticipated to be less than a total of five minutes. Coordination with the construction contractors will be maintained to minimize the duration of these delays. Please refer to Response 11.3 for further discussion of construction impacts on CalTrain riders and service.

Analysis of BART-related truck traffic during construction found that the impact to surface streets would be insignificant. As many as 200 truck trips per day would be made during construction of the BART extension but these would be distributed throughout the day. Though an insignificant impact, the mitigation measures proposed include the designation of construction routes within the BART right-of-way wherever possible, the coordination of vehicle routes with local jurisdictions, and additional traffic control measures. Construction of a cut-and-cover subway would have traffic impacts on specific streets that vary depending upon the alternative selected. For example, construction under South Spruce would require the mitigation of a temporary detour that would maintain accessibility during construction. In the vicinity of the City of Burlingame, the construction of Millbrae Avenue Station and nearby street improvements would cause delays and detours of local traffic, as described on page 3.13-49 of the DEIR/Technical Appendix. Access for residents in the Bayside Manor neighborhood would be maintained at Aviador Avenue until the Hillcrest Boulevard Extension is operational. Two-way traffic on Rollins Road would be maintained throughout the construction period. Traffic impacts to Highway 101 vary depending upon the alternative. Impacts to Highway 101 would be reduced to an insignificant level by maintaining the construction schedule.

- 14.85. The DEIR anticipate[s] construction activity would be particularly noticeable where the right-of-way is narrow (less than 60 feet) since workers will need access every 500 feet; however, no reference is made to California Drive in Burlingame. If access is anticipated from the east side then it will be located in a major drainage area which has been improved...Damage may be done

to the improvements and repairs will need to be in place at the beginning of the wet season. ([page] 3.13-9 [of the Summary DEIR/SDEIS])

**Response.** No access is anticipated from the east. The BART at-grade tracks will be built between the paved drainage channel and the CalTrain tracks with access only from the station at the north end. There will be no crossings over the drainage channel or CalTrain tracks.

- 14.86. During construction and after the protective sound walls are installed, the tailtrack will block the existing drainage from California Drive to the drainage channel on the east side of the railroad right-of-way. Construction could also affect sewer service to a large area of the city. How will these facilities be addressed during construction? What mitigation will be provided? Mitigations presently proposed do not address Burlingame. (page 3.13-23 [of the Summary DEIR/SDEIS])

**Response.** Natural drainage patterns that are interrupted by BART at-grade construction will be diverted through new culverts, passing the runoff from one side of the new tracks to the other, as is done for other typical civil construction projects. Existing utilities, such as sanitary sewers, will be re-routed, if necessary, to clear the path for new BART construction. Existing utilities owners will have the opportunity to review and comment on all proposed changes and additions to their facilities.

There are a few small storm drainage culverts passing surface storm runoff from the westerly side of the existing CalTrain tracks to the easterly side. These culverts will be extended under the proposed BART at-grade construction as well.

- 14.87. Will dry season construction apply to building the tailtrack and relocating the CalTrain rails in Burlingame? (page 3.13-24 [of the Summary DEIR/SDEIS])

**Response.** Construction of the at-grade tailtracks in Burlingame under Alternative VI is not projected to disturb the existing drainage channel or involve relocation of the CalTrain tracks. Consequently, any restrictions on construction activities to the dry season for this area are unwarranted.

- 14.88. The City should be held harmless if contaminants are found in the drainage area adjacent to the railroad right-of-way.

**Response.** Hazardous materials handling and soil contamination remediation are regulated by county, state and federal agencies. Should contaminants be discovered during construction, those parties responsible for the contamination will be identified and all applicable laws will be complied with.

- 14.89. The DEIR does not address any impacts of construction of the project on residential (including single family) or commercial areas in Burlingame, even those within 250-300 feet of the tailtrack....Please clarify and be explicit about studies, criteria and assumptions.

**Response.** The construction of this project will occur in the existing right-of-way. Impacts on the residential and commercial areas of Burlingame south of Millbrae Avenue will be minimal, although mitigation measures are defined. Please refer to Response 14.83 for further discussion of mitigation measures.

- 14.90. Since the BART station is in Millbrae, this growth inducing impact could be indirect and negative in the case of Burlingame. Existing commercial and residential facilities could be affected by the demands created by the station/accessibility without netting any financial gain to off set increased demands for police and fire services required by existing mutual aid agreements. Is this effect unavoidable or have effective mitigations been identified at other places? The Final EIR should address the issue. ([page] 4-17 [of the DEIR/Technical Appendix])

**Response.** A project is considered growth inducing if it could indirectly foster economic or population growth or the construction of additional housing. With the proximity of another rail line, Burlingame could be considered more attractive for development. Potential growth-inducing impacts are discussed on pages 4-23 to 4-28 of the DEIR/Technical Appendix. The ability of a major transit investment to stimulate appropriate land uses and desired economic growth is largely influenced by a local government's land use policies and decisions, as well as decisions by individual property owners. There is nothing being proposed by BART that would preclude existing commercial and residential properties from benefiting from the improved accessibility/mobility conferred by BART. The BART station at Millbrae Avenue can act as an impetus or catalyst for localized development in both Millbrae and Burlingame, generating property and sales tax revenues. These revenues can be used to offset increased demands for public services. As noted in Responses 14.57 and 14.59, the increased demand is predicted to be minimal and would not be expected to overburden local governments.

- 14.91. Analysis indicates that BART will cause an increase in the number of San Mateo residents who work in other counties, but it does not indicate that BART will increase the number of people who live in other counties and work in San Mateo county. Why not? ([page] 4-17 [of the Summary DEIR/SDEIS]) This reverse commute should be addressed.

**Response.** The growth-inducing analysis uses the ABAG input-output model to indicate the job growth generated by the proposed BART extension. The text explicitly notes that the location of this growth cannot be pinpointed, that the model is a regional one and can only forecast increased job opportunities throughout the region. It is difficult to predict the commuting patterns of the induced growth because the model does not predict where the jobs would be located nor where the employees would choose to reside.

- 14.92. The DEIR/SDEIS provides no estimated construction cost for the TSM option. It should be included. Moreover the validity of using the TSM option as described as the basis for comparison for the project should be evaluated; a better basis might be a more global look such as modifications to the CalTrain which include service to downtown San Francisco. This analysis should be included in the Final EIR.

**Response.** The estimated capital cost of the TSM Alternative is \$247 million (1994 dollars); the projects included in this total are expected to be undertaken regardless of the BART-San Francisco Airport Extension.

A global review of alternatives was performed prior to selecting the LPA. New FTA regulations on Major Investment Analysis (MIS) require regional transportation planners and providers to complete a multi-alternative review of mechanisms to ease congestion before committing to a single option. This process has been carried out through the 20-year planning process for the BART extension. During this period, approximately 93 alternatives for improving transportation in northern San Mateo County have been reviewed, including numerous BART extension alignments, several CalTrain improvement projects, light rail projects, car pool lanes and other highway improvements. A meeting was held April 14, 1995, where regional "stakeholders" including BART, SamTrans, FTA, MTC, Caltrans, and the JPB agreed that the global review requirement had been met, and that the project should proceed through the remaining environmental and engineering processes.

The CalTrain extension to downtown San Francisco is being evaluated through its own environmental process, parallel to that of the BART-San Francisco Airport Extension. At the time the DEIR/SDEIS was undertaken, the CalTrain extension to downtown San Francisco had no funding or status among regional funding priorities. Reviewing the environmental impacts of the BART extension in this way causes all impacts to be described as "worst case" formulation. Thus, traffic impacts at specific intersections are measured without the reduction that would result from some Peninsula riders taking CalTrain to a downtown station. Moreover, data supplied on the CalTrain extension in the 1992 AA/DEIS/DEIR remains valid, and can be reviewed in conjunction with information in the BART-San Francisco Airport Extension DEIR/SDEIS.

14.93. The incomplete financial plan for the project should be completed and made available with adequate time for the public to review it.

**Response.** The discussions of the funding structure included in the DEIR/SDEIS are generic and are not meant to represent the final funding position of each participating agency. Total project costs were defined as closely as possible at the time each environmental document was published, as was allocation of funding responsibilities among the parties. However, the determination of a final project funding structure is a parallel process to the environmental process, and work has continued on both efforts since publication of the DEIR/SDEIS.

The Financial Analysis found in Volume I of this FEIR/FEIS outlines the funding structure as defined at this point. Further refinements will inevitably be made. Of course, a project of the scale of the BART-San Francisco Airport Extension would not be undertaken without a complete financial plan in place and agreed to by all affected parties. Presentation of the plan, including capital costs, role of each participating agency, and funding mechanisms, will be made as soon as it is completed.

14.94. The DEIR/SDEIS indicates that the costs to SamTrans would be the same under any option, but no information is offered on SamTrans route assumptions or costs. There is also no information on CalTrain costs or local city costs associated with traffic, police, or fire service impacts. Quantified documentation to support the assumptions should be provided.

**Response.** SamTrans committed in early 1995 to providing \$99 million in capital costs to the extension project; the amount does not vary with selection of the BART build alternative. The BART-SamTrans Comprehensive Agreement, signed March 1, 1990, defines the terms of SamTrans contribution to operational costs of the extension. Current BART and SamTrans estimates indicate SamTrans participation will be approximately \$3.2 million in 1998, and \$5.5 million in 2010.

Please refer to Response 14.29 for a discussion of SamTrans decisions on bus routes.

CalTrain is not assumed to have costs specifically associated with the BART extension. The TSM and all BART build alternatives assume that CalTrain service is increased from 60 to 86 one-way trains per day, per the AA/DEIS/DEIR assumption defined by CalTrain and MTC in 1990. The decision to increase service and associated costs are independent of the BART extension.

Pages 3.5-6 to 3.5-9 of the Summary DEIR/SDEIS summarize the potential impacts and mitigation measures relating to emergency services requirements for the BART build alternatives. The incorporation of BART's standard preventative and protective safety features into the project design will help minimize service requirements from local jurisdictions. Emergency services support to existing high traffic BART stations at Daly City, Richmond and El Cerrito has been accommodated by local jurisdictions without increases to staff or equipment. In spite of indications that emergency services can be satisfied with existing resources, circumstances at each jurisdiction may vary and there is some uncertainty whether additional resources would be required for the increased demand for services. Any major new development, such as a shopping center, university, or theme park, results in important benefits to a city, and some additional costs for police and fire services.

BART will enter into cooperative agreements with all cities along the extension route, and will be the primary respondent to emergencies associated with the system and stations. BART's crime prevention initiatives, including the BART Against Auto Theft (BAAT) program co-sponsored by the California State Automobile Association, the Truancy Reduction and Intervention Program (TRIP), canine patrols, bicycle patrols, and the Commute with Confidence education program, coupled with the BART Police Station planned for the Tanforan Station are designed to maximize patron and community safety.

- 14.95. The report should indicate specifically what operating cost percentage would be covered by BART fares.

**Response.** Farebox recovery ratios were not defined at the time the Summary DEIR/SDEIS was published. The percentage of operating costs believed to be covered by fares is currently estimated at 85 percent for the BART-San Francisco Airport Extension. This is in contrast with an approximately 48 percent recovery rate for the remainder of the system, which is one of the highest rates in the nation.

Per proposed amendments to the BART-SamTrans Comprehensive Agreement, a portion of operations and maintenance (O&M) costs for the extension are the responsibility of SamTrans. A surcharge may be imposed at some or all BART extension stations by mutual agreement between BART and SamTrans. These surcharge revenues may be used to offset O&M costs of the extension.

- 14.96. An assumption is made in the report that SamTrans O&M costs would be similar under each of the alternatives. Since there are differing numbers of stations under different alternatives, detailed documentation to justify this assumption should be provided.

**Response.** Table 6-2 of the Summary DEIR/SDEIS outlines the estimated O&M costs for the alternatives. Differences in annual cost are related to number of passenger trips, number of stations, and length of track. The O&M costs are expected to be covered by farebox revenues including surcharges, which would be greatest for the alternatives with the highest O&M costs (greatest number of trips taken from the greatest number of stations). Therefore, O&M costs would be similar for each alternative. Please refer to Response 14.95 for a discussion of farebox recovery.

- 14.97. No detailed information is offered to backup CalTrain ridership assumptions. Without this ridership information the cost effectiveness of the alternatives or the selected project cannot be determined. This information should be provided.

**Response.** The cost effectiveness index uses regional transit person trips, or linked trips, for the transit patronage component in this calculation. Linked transit trips discounts the impacts of transfers between transit systems, such as between CalTrain and BART. Any person trip that used transit in making that trip is counted as one regional transit person trip, no matter how many transfers were made between transit systems. This measure of transit patronage is used for making comparisons between alternatives to estimate the number of new transit riders under an alternative. CalTrain ridership is assumed in the regional transit person trips as one of the transit systems used in these linked trips. The detailed information on changes in CalTrain ridership under each alternative is presented in Section 3.1, Transportation, of the DEIR/SDEIS.

- 14.98. The financial analysis chapter does not adequately state the project impact on SamTrans' financial condition. The DEIR/SDEIS should address the financial impact of the proposed alternatives on SamTrans.

**Response.** Please refer to Responses 13.3, 14.94, and 14.96 for a discussion of financial participation of SamTrans in the project.

- 14.99. SamTrans has committed to pay 25 percent of all FTA-eligible expenses. It is estimated that SamTrans needs an additional \$9.3 million per year to meet its commitments and could consider additional revenue sources such as BART fare surcharges and/or parking charges at the San Mateo County BART station. How much would these additional charges be? How would they affect fares and the ability to attract users from their cars or other mass transit to BART? Could SamTrans raise the amount of money necessary to meet its obligation from these sources? Please be explicit.

**Response.** SamTrans will not be covering 25 percent of all FTA-eligible expenses. Please refer to Responses 13.3, 14.94 and 14.96 for a discussion of financial participation of SamTrans in the BART-San Francisco Airport Extension.

A fare surcharge at the San Mateo County BART stations may be imposed by mutual agreement between BART and SamTrans. A surcharge could slightly decrease the patronage as compared to estimates contained in the DEIR/SDEIS. Considering the current and planned fare increases on BART, plus a slight increase in the current surcharge, to reflect inflation, the patronage at the BART-SFIA Extension stations could decrease by as much as eight percent of the patronage estimates made for the proposed project in 2010. Even with this decrease in patronage under the proposed project, the ridership forecast is still greater than projected under the 1992 LPA in the same year. Therefore, imposition of a fare surcharge is not expected to significantly affect patronage estimates contained in the DEIR/SDEIS.

- 14.100. Roadway improvements necessitated because of huge increases in traffic generated by BART should be financed by BART as a part of the BART Extension project. In particular exit ramp(s) from Highway 101 at Millbrae, Highway 101 at Broadway, and intersection improvements at El Camino Real and Millbrae. Mitigations should address this funding, and the costs should be added to the costs of the project.

**Response.** Capital costs for roadway and intersection improvements required to mitigate impacts resulting from the BART extension are included in Table 6-1 on page 6-2 of the DEIR/Technical Appendix.

The following mitigation cost information is now included in footnotes to Table 6-1 of Chapter 6:

The "Right-of-Way" line item includes mitigations costs associated with the purchase of land on Millbrae for street widening, cultural resource preservation, biological mitigation, and noise mitigation. The "line" line item includes mitigations costs associated with road modifications, soundwalls, construction measures designed to mitigate noise/vibration impacts, and landscaping. The "Stations" line item includes hydrological mitigation measures. The "Environmental mitigation" line item applies only to costs associated with mitigation of biological impacts on airport property west of Highway 101.

- 14.101. It appears in the DEIR/SDEIS that the principles of environmental justice have not been applied to Alternative VI and the Millbrae Gardens residential neighborhood with the same evenness that these principles have been applied to the Fifth Addition area of San Bruno. This issue should be specifically addressed in the Final EIR.

**Response.** BART has applied the principles of environmental justice described in the DEIR/SDEIS, and analyzed the impacts relating thereto, in the same manner to all neighborhoods, including Millbrae Gardens and the Fifth Addition. The comment's concern about "evenness" apparently arises from passages in the DEIR/SDEIS and the DEIR/Technical Appendix, which stated that the proposed project and the I-380 Least-Cost Design Option – which would require residential relocations in the Fifth Addition – may have disproportionate impacts on high-minority neighborhoods, whereas Alternative VI – which would require residential relocations in Millbrae Gardens -- does not appear to cause disproportionate impacts on high-minority neighborhoods.

These conclusions, however, were based on mathematical errors (regarding the number of expected relocations from these neighborhoods) that were discovered after the preparation and circulation of the DEIR/SDEIS. Using the corrected figures, which are reflected in revised pages 7-10, 7-17 and 7-18 of the DEIR/Technical Appendix (which were provided to all recipients of the document on January 20, 1995), BART and SamTrans have concluded that Alternative VI would not disproportionately affect high minority neighborhoods. This conclusion is reflected on revised pages 7-18 and 7-20 of the DEIR/Technical Appendix.

- 14.102. How does one over-ride executive order No. 12898? Does this affect the possibility of Alternative VI as a choice since it is the only alternative which affects the most high minority and low income residents? ([page] 7-18 [of the Summary DEIR/SDEIS])

**Response.** The President's Executive Order No. 12898 mandates that "To the greatest extent practicable and permitted by law...each Federal Agency shall make achieving environmental justice part of its mission by identifying and assessing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations...." Section 1-101. This requirement applies to all federal agencies (unless specifically exempted), but it mandates neither that agencies must reach prescribed conclusions in their assessments, nor shall the agencies approve or reject projects based on such assessments. Thus, based on the terms of the Executive Order, there is no need for an "over-ride" as suggested by this comment.

Regarding Alternative VI, the DEIR/SDEIS recognizes that this alternative may have disproportionate impacts on low-income neighborhoods. As a point of clarification, however, Alternative VI may not affect more high-minority or low-income neighborhoods than other alignments such as Alternatives IV or V.

## 15. CITY OF DALY CITY

- 15.1. Circulation impacts at Hickey Boulevard and I-280 are potentially significant as a result of the proposed project, however the DEIR/EIS provides no analysis in this location. The FEIR/FEIS should contain an analysis of potential impacts, including the impact on the volume/capacity ratio and level of service rating for Hickey Boulevard east of Gellert Boulevard. BART must provide mitigation measures to off-set the potential impacts.

**Response.** The traffic impacts on Hickey Boulevard under any of the BART build alternatives between I-280 and El Camino Real occur due to the extension of Hickey Boulevard to Hillside Boulevard and due to vehicles accessing the Hickey BART Station or the Chestnut BART Station under the Base Case Alternative. The addition of the Hickey Boulevard extension causes a redistribution of traffic from local streets to I-280 and Highway 101. These redistributions account for traffic count differences between the BART build alternatives and the No Build Alternative. The changes in traffic between the No Build Alternative and the BART build alternatives in the vicinity of the Hickey Station due to the Hickey Boulevard extension compared to the changes due to the Hickey BART Station were analyzed to compare these two different projects. These differences in traffic volumes between a BART build alternative and the No Build Alternative on Hickey Boulevard from I-280 to El Camino Real due strictly to the Hickey Boulevard Extension (under Alternative VI in this example) would be an additional 485 vehicles eastbound and an additional 259 westbound vehicles during the A.M. peak hour in the year 2010. The difference in traffic volumes on Hickey Boulevard between I-280 and El Camino Real due to a BART build alternative (again Alternative VI in this example) would be an additional 60 vehicles eastbound and a reduction of 110 westbound vehicles during the A.M. peak hour in the year 2010. The number of BART-related vehicles on Hickey Boulevard with the Chestnut Station would be less than with the proposed Hickey Station because many of the patrons driving to the Chestnut Station would use Westborough Boulevard rather than Hickey Boulevard to access BART.

The addition and reduction of vehicles due to the BART extension on Hickey Boulevard east of Gellert Boulevard would not cause any significant traffic impacts.

- 15.2. Tables S-8-Page S-43 [of the Executive Summary], Local Intersections: The DEIR/SDEIS proposes local intersection improvements as project mitigation. Comment: This is insufficient. The FEIR/FEIS should list specific mitigation measures for local intersection improvements.

**Response.** Specific mitigation measures for significant impacts to intersections in the study area are described in the DEIR/Technical Appendix. For example, mitigation measures for significant impacts to local intersections under Alternative VI are described on pages 3.1-159 through 3.1-162 of the DEIR/Technical Appendix.

- 15.3. Hauling of construction material and equipment for the BART project on the City streets may impact roadway structural integrity. A mitigation measure should be included in the FEIR/FEIS stating that BART shall obtain a haul route permit before hauling any construction material and equipment over any City street. In addition, BART should pay applicable fees as required.

**Response.** Before hauling construction material and equipment for the BART extension, BART recognizes that haul permits must be obtained from affected cities and that applicable fees must be paid.

- 15.4. The proposed hydrological mitigation measures suggested in the DEIR/EIS for the Colma Creek Drainage improvements are insufficient and would create a damming effect that may aggravate flooding of the Treasure Island Mobile Home Park and other areas in the Colma Creek zone. To prevent the damming effect and resulting flooding, BART could construct improvements as suggested in Projects 8-11 of the Colma Creek Improvements Validation Study by Reimer Associates, dated February 16, 1995....The only economical and feasible scheme to meet both the needs of BART and the San Mateo County Flood Control District Colma Creek Zone is to construct the Colma Creek flood control channel over the BART tunnel between the proposed Mission Road BART undercrossing and the proposed Hickey Station.

**Response.** Many comments were received from the San Mateo County Flood Control District, Caltrans, and the cities of Daly City and South San Francisco, which led to a series of technical discussions among all affected parties. As a result of these discussions, BART proposes to implement Alternate II, as defined in the Reimer Associates Colma Creek Improvements Validation Study dated February 16, 1995 with funding contributions from the Flood Control District. The Reimer Study identifies four different alternates for providing drainage improvements along Colma Creek between Mission Road and Oak Avenue. The specific drainage proposals identified by the commentor (i.e., Projects 8-11) are included as part of Alternate IV from the Reimer Study. This alternate as well as Alternates I and III are rejected for reasons described below.

Before discussing the rejected alternates, the components, merits, and environmental implications of choosing Alternate II are presented here. The proposed improvement plan would:

- Dedicate surface rights to the San Mateo County Flood Control District (SMCFCD) to allow it to construct a new channel within BART right-of-way over the BART cut-and-cover subway between Mission Road and the proposed Hickey BART Station as proposed in the Reimer Associates Validation Study Report.
- Set the vertical BART subway track alignment such that it will allow the new channel to be constructed over the top of the subway in the above segment.
- Excavate the area of the new channel cross section and dispose of the excess material removed, leaving a trapezoidal, earth-lined channel in place in the above segment.
- Permit the SMCFCD to construct and maintain specific flood control facilities necessary over the BART subway in the above segment.
- Construct the 50-year capacity channel improvements utilizing concrete lining from the confluence of the new channel described above and the existing Colma Creek at the Treasure Island Trailer Park to Oak Avenue on the current alignment of Colma Creek. BART would

utilize gabion construction along this segment instead of concrete lining construction, contingent upon the SMCFCD contribution to BART of an amount equal to the difference in cost between gabion and concrete channel construction.

- Dedicate the necessary additional easements to the SMCFCD to allow maintenance of the flood control improvements.
- Construct a 100-year capacity concrete box culvert under the new Hickey Station parking lot with transitions at each end to the 50-year capacity channel improvements.
- Perform the environmental analysis and other necessary permits for the aforementioned improvements.

Implementation of the proposed improvements would mitigate potential flood impacts identified for Alternative VI as Impact 2 on page 3.8-32 of the DEIR/Technical Appendix and would be incorporated into a revised discussion of Impact 6 on page 3.8-33 (pursuant to Response 25.1). This mitigation would not result in new significant impacts. Potential flooding impacts would be avoided. Potential environmental effects of these improvements are noted below, none of which is considered significantly adverse.

*Transportation.* The new and improved channels and culverts proposed between Mission Road and Oak Avenue would not affect transportation because the drainage facilities would not intersect or disrupt existing roadways.

*Land Use.* No displacement, neighborhood cohesion, or socio-economic impacts would occur as a result of new and improved channels and culverts. The improvements would be consistent with the San Mateo County Flood Control District proposals to improve Colma Creek and reduce existing flood problems in Colma and South San Francisco.

*Visual Quality.* The new and improved drainageways would be depressed in a concrete-lined channel or underground in a box culvert. Thus, the visual setting would not be significantly altered.

*Cultural Resources.* Ground surface disturbance and excavations required for the drainage improvements would already be required for the BART cut and cover alignment. There would be no new additional disturbance to cultural resources associated with the new and improved channels and culverts. Subsequent to release of the draft documents, the SHPO has determined that the Lagomarsino Farm District is not eligible for the NRHP. However, it would not be affected by the introduction of an open channel since the drainageway would not alter the district's visual or auditory setting.

*Community Services.* Police, fire, and emergency response would not be hindered nor would demand for these services increase with the proposed drainage improvements. Water and wastewater services would not be affected.

*Geology.* The inclusion of an open channel above or alongside the BART subway structure would not alter the geologic setting nor create new hazards. The right-of-way would already be disturbed by BART and any loose, unconsolidated soils would be replaced by compacted soils for construction of the BART subway. The culverts would be concrete-lined thereby avoiding creekbank erosion and sedimentation.

*Biology.* No increase in wetland disturbance would occur as a result of the new or improved channels and culverts.

*Hydrology.* Storm drainage capacity would be increased with implementation of the drainage improvements and mitigate potential flood impacts for BART facilities and nearby land uses.

*Noise and Vibration.* No new noise or vibration impacts would result from long-term operation and maintenance of the drainage improvements..

*Air Quality.* No air emissions would result from long-term operation and maintenance of the drainage improvements.

*Public Health.* The existence of potentially contaminated soils or groundwater would be identified and removed prior to construction of the BART alignment so that implementation of new or improved channels and culverts would not increase the risk of exposure to hazardous materials.

*Energy.* Operation and maintenance of the open channels and underground culvert would not require a significant amount of energy resources.

*Construction.* Construction impacts for the drainage improvements between Mission Road and Oak Avenue would be the same as those identified in the DEIR/Technical Appendix for the BART cut and cover alignment, with the exception of a slight increase in the number of truck trips to haul excavated material. The amount of backfill material needed for the cut and cover subway would be slightly less with the drainage improvements because the open channels north and south of the Hickey Station would be constructed above the subway box. Thus, the amount of backfill required is less and the volume of excavated material to be hauled away is greater.

The drainage improvements identified above by BART are identical to the Reimer Study Alternate II with two exceptions. First, the channel improvements will be designed for the 50-year storm rather than the 100-year storm recommended by SMCFCD, which is consistent with SMCFCD design criteria. However, the channel would be built with a two-foot freeboard and would thus provide 100-year flood capacity. This design was specified by BART in the Section 404 permit which has been reviewed by the SMCFCD. Second, the SMCFCD proposes that an urban creek park be developed along the channel (this is also called Project 11 in the Reimer Study). BART will, as noted, provide easements to the District for operation and maintenance of the drainage facilities. The construction of an urban creek park is, however, not warranted to address the flood impacts of the BART project. Thus, while BART will cooperate with the District, the construction of or contribution to an urban creek park would be beyond BART's mitigation obligations. BART does, however, intend to provide for a bike path in the same segment that the SMCFCD has proposed as the open channel with an urban park setting.

As noted above, the Reimer Study identified four different alternates for mitigating the damming effect created by the Hickey Station and the resultant flood hazards. According to the Reimer Study, each of these alternates would achieve mitigation and reduce flood impacts to an insignificant level. BART has evaluated the alternates and the Aerial Design Option LPA will incorporate Alternate II. Alternate I proposes a box culvert within Mission Road, from Mission Road to the new street at the south end of the BART Hickey Station. This would involve construction outside BART's proposed construction right-of-way and be substantially more costly than the comparable drainage improvements for this segment under the other alternates. The channel in Alternate II will contain flood flows in excess of the 50-year design capacity. The box culvert located in Mission Road in Alternate I is designed only for 50-year capacity. The additional hydraulic head required to contain a 100-year storm within this closed conduit has not been shown to be available. BART can attain a higher degree of mitigation for substantially less cost and less environmental impact. Even the SMCFCD acknowledged in its comment letter that this alternate would be too expensive (because of the need to demolish and rebuild Mission Road for utility relocation and culvert construction and because of disruption to existing businesses) and that a preferable solution for this segment would be to provide the drainage improvements directly above the subway box, as proposed by Alternates II, III, and IV. Accordingly, Alternate I was rejected from further consideration.

Alternates III and IV both recommend diverting the flood control channel to the old SPTCo right-of-way and shifting the BART alignment westward of the new channel, within the existing Colma Creek alignment (this is also identified as Project 10 in the Reimer Study). While this proposal would provide the same degree of mitigation of flood impacts as Alternate II, the shift in the BART alignment westward would worsen groundborne vibration impacts for Kaiser Medical Center, compared to the impacts presented in the DEIR/Technical Appendix. Page 3.9-20 of the DEIR/Technical Appendix explains that the BART alignment lies about 125 feet from Kaiser and would trigger groundborne vibration impacts by at least 9 dB above BART's design criteria. Shifting the alignment closer by about 80 feet, as envisioned by the Reimer Study Alternates III and IV (and Project 10), would exacerbate this significant impact. The proximity of the line would also increase impacts at other sensitive receptors, including residences, a trailer park, and a motel, along El Camino Real. Thus, these alternates would reduce flooding impacts to an insignificant level but create worse noise impacts than are currently projected for the LPA. In addition, BART cost studies show Alternates III and IV to be more costly than Alternate II when all costs, including BART construction, are considered. Because Alternates III and IV would worsen identified significant adverse effects and be more costly, compared to Alternate II, and because Alternate II provides sufficient mitigation to reduce flooding impacts to an insignificant level, Alternates III and IV were rejected from further consideration.

#### 15.5.

The proposed BART extension south of the Hickey Station and within the old SPRR right-of-way will require a deeper tunnel construction to cross under the existing flood control channel. A more cost effective alternate proposed in the Reimer Associates study would allow the construction of the BART tunnel at a much shallower depth. This can be achieved by diverting the flood control channel to the old SPRR right-of-way and placing the BART extension to the west of the new channel. The BART project should include this channel diversion of the open channel between the Treasure Island Trailer Park and the Mission Street/Oak Avenue intersection to accommodate a 100-year event at its full cost to minimize the initial construction and future maintenance costs.

**Response.** This alternative in the Reimer Associates Report is not cost effective due to the additional property required to relocate the BART subway to the current location of Colma Creek south of Hickey Station. Please refer to Response 15.4 for a discussion of hydrologic mitigation measures for the Colma Creek drainage improvements.

#### 15.6.

In addition, BART should incorporate the following mitigation measures into the FEIR/FEIS:

- Dedicate surface rights to the County Flood Control District to allow it to construct channel improvements within its right-of-way over the BART tunnel between Mission Road and the proposed Hickey Street BART station as proposed in the Reimer Associates Validation Study Report.
- Set the vertical BART tunnel track alignment such that it will allow the channel to be constructed over the top in Alternate Section A (Reimer Study Report).
- Excavate the area of the channel cross section and dispose of the material removed, leaving the shoring piles and backfill in place so as to frame a channel in the aforementioned segment.
- Permit the Flood Control District to construct and maintain specific flood control facilities necessary over the BART tunnel as generally proposed in the Reimer Study Report.
- Construct the 100-year capacity channel improvements utilizing gabion construction methods from the confluence of the Hickey Boulevard drain outfall at the Treasure Island Trailer Park to Oak Avenue within the old SPRR right-of-way and dedicate the necessary right-of-way to the flood control zone to allow maintenance of the flood control improvements.
- Construct appropriate channel sections upstream of Oak Avenue so as to transition safely from one hundred year capacity to the fifth year capacity of the existing channel downstream of Oak Avenue.

- Perform the environmental analysis and other necessary permits for the aforementioned improvements.

**Response.** Please refer to Responses 15.4 and 15.5 for a discussion of improvements at Colma Creek.

- 15.7. If BART is not constructed at Hickey Street, the Reimer Report will have to be modified, but the remaining alternatives suggested in the Reimer Report would still be valid. In contrast, BART's current proposal to enclose a portion of Colma Creek in a box culvert at the proposed Hickey Station will result in substandard upstream and downstream channel capacity. As a result, there would be no overall hydraulic capacity improvement of the channel.

**Response.** The selected LPA includes a Hickey Station with the Colma Creek improvements as discussed in Response 15.4. Any change to the station layout or location would require a reevaluation of environmental mitigations with the affected cities and agencies.

- 15.8. We are supportive of Alternative Alignment VI with two related qualifications. First, that the implementation of this alternative not impede or restrict current plans for the expansion of San Francisco International Airport and, second, that this alignment be coupled with appropriate and effective mitigations for traffic and other impacts within the City of Millbrae and other communities impacted by this alignment.

**Response.** BART has maintained ongoing discussions with both the SFIA and the communities along the project corridor. These meetings will continue throughout preliminary engineering, design, and construction in order to coordinate BART activities with those of local public agencies. One reason that the Alternative VI Aerial Design Option was selected as the LPA is that it allows SFIA to proceed with its expansion plans more readily than the bored tunnel design under Alternative VI. Regarding the commentor's second point, BART will commit to mitigating impacts created by the BART extension and will consider the City's concerns in fashioning its mitigation.

## 16. CITY OF MILLBRAE

- 16.1. Millbrae believes that BART should be extended into the San Francisco International Airport, not near it....Although the citizens would prefer that no BART station be located in Millbrae, if there is to be a station, it should be at Millbrae Avenue, making Alternative VI the only feasible alternative that will protect the integrity of our single-family residential neighborhoods....Millbrae will only support Alternative VI if all the adverse impacts are fully mitigated and those mitigations are fully funded by the BART Extension project.

**Response.** Please refer to Response 2.7 for a discussion of the important role of the public, including cities, in the EIR/EIS process.

- 16.2. The DEIR/SDEIS lacks adequate provision for necessary mitigation of the probable impact of BART on local police, fire and emergency services. In fact, the environmental documents do not contain analysis, nor even mention of the likely increase in crime which would result from a BART station in Millbrae. Recommendation: BART should not be extended without realistic and objective analysis of an increase in crime and provision for thorough and reliable mitigation and prevention measures which have no fiscal or financial impact on the City of Millbrae.

**Response.** The analysis of impacts on local police, fire, and emergency medical services was based on two sources of information. First, the local jurisdictions, including the Millbrae police and fire departments, were contacted to obtain information on current service levels and capacities. Second, local jurisdictions already served by BART were contacted to learn of the actual demand imposed by BART facilities. Based on the latter source of information, it was

reported in the DEIR/Technical Appendix in Section 3.5, Community Services, that local police, fire, and emergency medical services would experience an increase in calls for service. The types of calls for service are described in the DEIR/Technical Appendix on pages 3.5-8 and 3.5-9. The introduction of BART into a community does not generally result in increased criminal activity, or the "importation" of crime from other areas. A BART station, like a shopping center, city park, or university, may be the site of crime, but the station is not causing an increase in the incidence of crime. Communities contacted as part of the analysis that have existing BART service have not needed to increase staff or equipment. BART cannot guarantee that Millbrae or any jurisdiction served by the proposed project would not be called upon to provide emergency response. In fact, it is clear that this need for local support would be required. BART is committed to working with local jurisdictions to design the facilities to minimize the potential for crime and fire incidents.

BART serves several high crime areas that often require additional police presence in order to manage police problems indigenous to these areas. BART Police concentrate on controlling crime within the BART system and making the system safe for passengers. During its years of revenue operation, incidence of violent crimes on BART have been minimal compared to other urban mass-transit systems in the nation. Increased crime on BART property would necessitate the need for an increase in BART police staffing. BART management is responsible for these decisions.

Please refer to Response 14.94 for a discussion of local emergency services costs.

#### 16.3.

The [DEIR/]Technical Appendix (page 3.4-35)....misrepresents the views expressed in the archaeological base reports....The absence of archaeological deposits on the surface does not preclude the existence of archaeological material beneath the surface in the Project Area. Previously unrecorded and/or undetected cultural deposits may be encountered during earthmoving activities, and some of these may be significant.

**Response.** The Archaeological Survey Report (ASR) states that no new sites were located or recorded in the project vicinity as a result of 11 recent archaeological reconnaissance surveys (ASR, page 9, paragraph 1). Due to the reported absence of sites, the negative results of the field survey performed for the project, and the high level of disturbance of the project corridor, the DEIR/Technical Appendix states that significant archaeological resources are not anticipated in the project corridor. Nonetheless, the Technical Appendix discloses that potential, buried deposits associated with the one known, previously recorded site (CA-SMA-299) located within the project corridor could incur disturbances under all of the BART alternatives (page 3.4-35, last paragraph).

Mitigation Measure 2.1, Archaeological Testing and Compliance with State Historic Preservation Office (SHPO) procedures, from the DEIR/Technical Appendix will be implemented to ensure investigation prior to construction. Mitigation 2.1, page 3.4-15 of the DEIR/Technical Appendix is modified as follows:

During the engineering design phase of this project and/or in conjunction with utility relocation activities, BART will have a trained archaeologist perform a mechanical trench excavation (using a backhoe) to establish the presence or absence of archaeological soils at site CA-SMA-299.

If subsurface prehistoric materials are uncovered, then the procedures of the State Historic Preservation Officer, which call for the materials to be excavated, catalogued, analyzed, evaluated and curated will be followed prior to construction activities. These activities should be conducted by a member of the Society of Professional Archaeologists. If the archaeologist concludes that there is an absence of archaeological material beneath this area after excavation activities, BART would conclude that deposits are not likely to be found during construction.

Nevertheless, for CA-SMA-299 and for all construction sites, construction personnel would be supplied information about the basic characteristics of archaeological deposits

and Native American artifacts. Contractors would be told to cease earthmoving activities if these resources are identified at during construction. If any cultural remains are uncovered, work within ten feet of the resources should be stopped immediately, a qualified archeologist should be retained and actions as stated on page 13 of the Archaeological Resources Report would be implemented.

- 16.4. The base reports do not rule out the possibility that significant archaeological resources could be uncovered. Therefore, procedures should be in place in the likely event that archaeological deposits are encountered.

**Response.** Please refer to Responses 6.29 and 16.3 for a discussion of such procedures.

- 16.5. Efforts to ensure the appropriate identification, evaluation, and mitigation of archaeological deposits should be made for unidentified cultural resources in Millbrae, and...along the entire length of the Project Area....Construction personnel must be supplied information about the basic characteristics of archeological deposits and told to cease earthmoving activities if these are identified.

**Response.** Provisions for the actions noted by the commentor shall be included in the Memorandum of Agreement to be established by BART, SamTrans, the SHPO, the Federal Transit Administration (FTA), and the Advisory Council on Historic Preservation (AHP), as listed under Mitigation Measure 1 (DEIR/SDEIS, page 3.4-8, last paragraph) of the DEIR/SDEIS. Please refer to Responses 6.29 and 16.3 for a discussion of archaeological resources.

- 16.6. Millbrae Train Depot: Mitigation to move 15 feet is inadequate. Move station and incorporate into design at Alternative VI as an interpretive center with a transportation theme.

**Response.** Please refer to Response 6.24 for a discussion of the Millbrae Train Station. Under the revised plans, the station would not be relocated, and its function would not be changed.

- 16.7. There is reason for concern that a BART station in Millbrae will affect the number and seriousness of crimes committed in Millbrae....It should suffice for present purposes to alert BART to Millbrae's determination that those problems and resulting efforts will [be] the responsibility of BART and at BART's sole expense.

**Response.** Please refer to Response 16.2 for a discussion of increased calls for service and Response 14.57 for a discussion of the California Mutual Aid Agreement and the implementation procedures involved when it is invoked.

- 16.8. BART must take or sponsor all means necessary to assure that traffic volume levels on these residential streets do not exceed levels that are safe and appropriate to the limitations and existing usage of those streets....

**Response.** Traffic levels on local residential streets in Millbrae were examined during the traffic analysis for the BART extension DEIR/SDEIS. Please refer to Responses 16.18, 16.19, 16.20, 16.21, and 16.22 for a discussion of traffic impacts to specific local residential streets in the City of Millbrae under Alternative VI and the Alternative VI Aerial Design Option. In addition to analyzing congestion impacts to local streets due to changes in traffic related to the BART extension, the DEIR/SDEIS analyzes the impacts to these changes on air pollution, safety, noise and provision of community services.

- 16.9. The EIR does not account for traffic at all, except to admit it will overburden 101 and existing ramps....While traffic from other avenues of approach can be mitigated, I do not believe traffic from 280 can be mitigated except by eliminating a Millbrae station.

**Response.** The traffic modeling performed for analyzing impacts in the BART–San Francisco Airport Extension DEIR/SDEIS included local roadways between I-280 and El Camino Real but these specific volumes were not included in the DEIR/SDEIS. The traffic volumes estimated for all the roadway links in the study area under all alternatives in all analysis years are too voluminous to include in either the Summary DEIR/SDEIS or DEIR/Technical Appendix. However, the calculation sheets from the intersection level of service analysis under all alternatives in all analysis years are appendices to the Transportation Technical Report of the DEIR/SDEIS. Intersections created by cross streets with El Camino Real in the vicinity of the Millbrae Avenue Station were analyzed and the findings are contained in Section 3.1 and Appendix C of the DEIR/Technical Appendix.

Also, please refer to Responses 16.18, 16.19, 16.20, 16.21, and 16.22 for a discussion of traffic impacts to specific local residential streets between I-280 and El Camino Real in the City of Millbrae under Alternative VI and the Alternative VI Aerial Design Option. No significant traffic impacts were found on local streets between I-280 and El Camino Real under the Alternative VI LPA or the Aerial Design Option LPA.

- 16.10. If there is a BART station in Millbrae, crime must be mitigated by increased law enforcement, at BART's expense.

**Response.** Please refer to Responses 14.57 and 16.2 for a discussion of crime at BART stations and BART's responsibilities for addressing the potential for increased incidents of crime.

- 16.11. What about the wear and tear on the streets and other city facilities of having thousands of cars and perhaps tens of thousands of people converge on Millbrae every day?

**Response.** Some wear and tear on local infrastructure might be expected with increased traffic and utility demand associated with a BART facility. However, there is no evidence that a BART station causes significant impacts on infrastructure, over and above those already identified in the document. Please also refer to Response 15.3 for a discussion of hauling permits and applicable fees.

- 16.12. Even if BART takes responsibility for re-locating the residents of the Garden Lane Apartments...does that mean other apartments in Millbrae will be rent-subsidized to maintain Millbrae's stock of low-income housing?...Since Millbrae has not asked BART to come to Millbrae, much less to destroy our low-cost housing, Millbrae should be relieved of the burden of finding other low-cost housing.

**Response.** The Garden Lane apartments are not specifically restricted to low-income tenants and therefore they are not included in the inventory of subsidized housing for which the City of Millbrae has the responsibility. As the official displacing agencies, BART/SamTrans will bear full responsibility for complying with state and federal laws regarding relocation and replacement housing, thereby placing no burden on the local communities in which displacement will occur.

- 16.13. The Comparison of Key Impacts concerning Traffic (pages S-27 and S-28 [of the Executive Summary]) mentions freeways, local intersections and parking - there is no reference to residential streets in the community....I anticipate that the noise and pollution and general clogging of traffic will be a major nuisance and expense....and [will] have a decidedly adverse affect upon property values in the residential areas of Millbrae and Burlingame....The residential streets, such as Murchison, Millbrae Avenue and Hillcrest, never were intended to be thoroughfares and there is no way they can accommodate a heavy traffic flow to and from a 3,000 car BART parking garage at the bottom of the hill.

**Response.** Between I-280 and El Camino Real, the roadways of Murchison, Millbrae Avenue and Hillcrest Boulevard were found to carry insignificant numbers of vehicles to or from a BART station and therefore would not have significant impacts on these streets. Please refer to Response

16.18 for further discussion of traffic impacts on these streets. These changes in traffic volumes were considered in analyzing noise and air quality pollution effects. Because the volumes were insignificant, significant noise and air quality impacts were not predicted. A more complete description of the air quality analysis is discussed in Response 16.80.

The University of California Berkeley's Center for Urban Planning has produced studies which assess property values around BART stations. The conclusion of those independent studies find that property values around BART stations have increased. Please refer to Response 16.73 for a discussion of development opportunities.

- 16.14. Criminal activity is attracted to or generated by the presence of a BART station....We do not want the quality of life in Millbrae to be affected adversely by crime at or near a BART station....Millbrae should not be stuck with the costs of policing the hordes of travelers and visitors drawn to Millbrae by BART. We have trouble enough now affording the level of public safety protection dictated by current circumstances, let alone the heightened level that would be required if a BART station comes to Millbrae.

**Response.** Please refer to Responses 14.57 and 16.2 for a discussion of crime in BART stations and BART's responsibilities for addressing the potential for increased incidence of crime.

- 16.15. Extra costs that would be incurred by Millbrae if a BART station is located here...include, the wear and tear on the infrastructure of the City....Millbrae should not have to incur any burdens or expenses relative to a BART station in Millbrae.

**Response.** Please refer to Response 16.11 for a discussion of wear and tear on local infrastructure.

- 16.16. The Garden Lane Apartments...will have to be torn down, and the residents relocated, if Alternative VI is chosen....However, there is no indication of whose responsibility it will be to relocate those residents. The EIR should spell out exactly what will be done and by whom and at whose expense.

**Response.** If tenants are required by the project to relocate, eligible tenants will be provided with all applicable relocation benefits. See pages 3.2-55 and 3.2.56 of the DEIR/Technical Appendix for a discussion of steps which are required under existing laws and regulations to implement a relocation program. Prior to beginning any relocation, BART/SamTrans will be required to develop a detailed relocation plan. As the displacing agencies, BART/SamTrans will have full responsibility for all phases of relocation: acquisition, information, assistance, and relocation payments.

- 16.17. If the Garden Lane Apartments are removed, Millbrae may be criticized for having an inadequate supply of low-cost housing.

**Response.** The Garden Lane Apartments are not specifically restricted to low-income tenants and therefore they are not included in the inventory of subsidized housing. The rents may be lower and more affordable than the average rents in Millbrae and the loss of these units could have an impact on the supply of low-cost housing.

- 16.18. Alternative VI-Millbrae Ave. Station....There is no mention in the report on the effect of increased traffic on Trousdale Drive, Burlingame from the 280 N exit to El Camino.

**Response.** Approximately 165 additional vehicles would exit I-280 to travel eastbound toward the Millbrae Avenue BART Station under Alternative VI during the A.M. peak hour, and approximately 25 BART-related vehicles would travel westbound onto I-280. Most of the BART-related vehicles using I-280 would travel on Trousdale Avenue although some may use Millbrae

Avenue. Under Alternative VI during the A.M. peak hour, these eastbound vehicles increase to 275 vehicles between Ashton Avenue and El Camino Real while an additional 75 vehicles travel westbound in this corridor segment in 2010. These 350 additional vehicles are from residences in the local neighborhoods, as well as vehicles using I-280. These same vehicles would use Trousdale Drive and Millbrae Avenue primarily, and Murchison Drive and Hillcrest Boulevard secondarily. These four roadways are projected to carry approximately 2,300 eastbound vehicles and about 1,500 westbound vehicles during the A.M. peak hour under the No Build Alternative in 2010, between Ashton Avenue and El Camino Real. Approximately 855 vehicles are projected to travel eastbound, and 500 vehicles would travel westbound on Trousdale Avenue during the A.M. peak hour under the No Build Alternative in 2010. No significant traffic impacts would occur on Trousdale Drive, Millbrae Avenue, Murchison Drive, and Hillcrest Boulevard between I-280 and El Camino Real under Alternative VI except for the significant impact identified at the intersection of El Camino Real and Millbrae Avenue, as described under Impact 6 on page 3.1-160 in the DEIR/Technical Appendix.

- 16.19. Alternative VI-Millbrae Ave. Station....There is no mention in the report on the effect of increased traffic on Hunt Ave., Burlingame and its continuance into Murchison Drive, Millbrae from its western border to El Camino and/or California Drive.

**Response.** Hunt Avenue under Alternative VI will carry an insignificant number of vehicles, i.e., less than ten, related to the BART extension. Please refer to Response 16.18 for a discussion of BART-related traffic that would use Murchison Drive, Millbrae Avenue, Trousdale Avenue, and Hillcrest Boulevard.

- 16.20. Alternative VI-Millbrae Ave. Station....There is no mention in the report on the effect of increased traffic on Sebastian from Trousdale to its intersection with Murchison Drive and whether an increase will contribute to intolerable traffic volume on that street.

**Response.** Selected intersections were not based on distance from BART stations, but rather on whether the intersection was either adjacent to a BART station or on a primary road to a BART station. In general, a large selection of intersections near BART stations were studied because many nearby intersections have the potential to be affected. Nonetheless, the following information is provided in response to the commentator's question. Sebastian from Trousdale to Murchison Drive would carry approximately 10 BART-related vehicles during the A.M. peak hour and P.M. peak hour in 2010 under Alternative VI. This includes traffic from local residences and given its minimal traffic increase, this volume represents an insignificant impact to this street.

- 16.21. Alternative VI-Millbrae Ave. Station....There is no mention in the report on the effect of increased traffic on Magnolia from Trousdale to its intersection with Murchison Drive.

**Response.** Approximately 10 BART-related vehicles during the A.M. peak hour and P.M. peak hour in 2010 would travel on Magnolia from Trousdale to Murchison Drive under Alternative VI. This minimal amount of traffic is from local residences and represents an insignificant impact to this street.

- 16.22. Alternative VI-Millbrae Ave. Station....There is no mention in the report on the effect of increased traffic on Ashton from Trousdale to Millbrae Avenue.

**Response.** Ashton from Trousdale to Murchison Drive is projected to carry approximately 50 BART-related vehicles during the A.M. peak hour in 2010, and 20 BART-related vehicles during the P.M. peak hour in 2010 under Alternative VI. The minimal increase in traffic would result in an insignificant impact to this street.

- 16.23. Alternative VI-Millbrae Ave. Station....There is no mention in the report on the effect of increased traffic from the western edge of Millbrae Avenue to El Camino.

**Response.** Please refer to Response 16.18 for a discussion of BART-related traffic that would use Millbrae Avenue as well as Trousdale Avenue, Murchinson Drive, and Hillcrest Boulevard.

- 16.24. Alternative VI-Millbrae Ave. Station....There is no mention in the report on the increased traffic on Hillcrest to El Camino resulting from 280 N exits made at the Millbrae Ave. exit.

**Response.** Please refer to Response 16.18 for a discussion of BART-related traffic that would use Hillcrest Boulevard as well as Trousdale Avenue, Millbrae Avenue, and Murchinson Drive.

- 16.25. ...Traffic studies need to be made to determine the extent of additional traffic resulting from travelers exiting from 280 N through Trousdale Drive and Millbrae Avenue exits. From these studies a plan of mitigation to be made to incorporate: 1) Local intersection improvements; 2) Speed limits, bumps (if legal); [and] 3) There may be a need to install a timed signal system at the intersection of Murchison and Ashton, and/or Ashton & Millbrae Ave.

**Response.** Please refer to Responses 16.18 and 16.22 for a discussion of BART-related traffic on Trousdale Avenue and Millbrae Avenue and on Ashton from Trousdale to Murchison. No additional traffic control devices would be required at the intersections of Murchison/Ashton or Millbrae/Ashton under Alternative VI or any of the other BART build alternatives.

- 16.26. There will be additional traffic on Rollins Road in Burlingame to the proposed BART station...[which could be]...mitigat[ed by]...local intersection improvements, speed controls and left hand turn signals at appropriate intersections on Rollins Road.

**Response.** Compared to the No Build Alternative in 2010, Rollins Road in Burlingame in the vicinity of Millbrae Avenue Station would carry an estimated additional 100 vehicles northbound during the A.M. peak hour under the Alternative VI LPA and the Aerial Design Option LPA, and an additional 50 southbound vehicles during the P.M. peak hour, compared to the No Build Alternative in 2010. The revised Millbrae Avenue Station design plan as described in the FRDEIR/S#2DEIS includes a new exit to Adrian Road. With this new connection, an additional 15 cars would travel southbound on Rollins Road and an additional 80 vehicles would travel northbound on Rollins and turn right onto Millbrae Avenue during the P.M. peak hour. These increases in traffic volumes would not create significant traffic impacts along Rollins Road south of Adrian Road.

- 16.27. There will be additional traffic on California Drive....This traffic will bring increased safety problems at intersection with Trousdale and Murchison Drive [which could be] mitigat[ed by]...installation of arterial stop signs at Trousdale (Burlingame) and Murchison Drive (Millbrae) where these intersections meet with California Drive.

**Response.** California Drive between Trousdale and Murchison will carry approximately 160 BART-related vehicles during the A.M. peak hour in 2010 and 110 BART-related vehicles during the P.M. peak hour in 2010 under Alternative VI. California Drive north of Murchison Drive will carry approximately 80 BART-related vehicles during the A.M. peak hour in 2010 and 80 BART-related vehicles during the P.M. peak hour in 2010 under Alternative VI. These volumes would not create a significant impact to traffic operations on California Drive.

- 16.28. Figure 11, Page 137 of Design Appendix....Site plan does not indicate an exit to 101 N from the east on Millbrae Ave. on ramp. Mitigation: Minor correction in the drawings. The exit presently exists.

**Response.** The Millbrae Avenue BART/CalTrain Station Site Plan has been revised as a result of communication between BART and the City of Millbrae. Figure 2-11 in the FRDEIR/S#2DEIS illustrates the modified station plan and includes the proper on- and off-ramps from Highway 101.

16.29. The Local Preferred Alternat[iv]e selected in spring of 1992 was selected before Alternative VI. The LPA should not be given a priority preference.

**Response.** The DEIR/SDEIS evaluates each of the alternatives at an equal level of review as the LPA. As explained in the document, the DEIR/SDEIS was recirculated, in part, because new alternatives were added for consideration.

16.30. Construction - Does not include Millbrae re Police and Fire protection.

**Response.** Construction-period impacts to Millbrae police and fire protection services are identified on pages 3.13-98, 3.13-99, and 3.13-100 of the DEIR/Technical Appendix, for Alternatives IV, V, and VI, respectively. The proposed project, the I-380 Least-Cost Design Option, and Alternatives I, II, and III do not propose stations/facilities in Millbrae, so that BART construction would not affect emergency response in this community. The Alternative IV LPA does not have a tunnel alignment into the airport, thereby reducing the concern about a tunnel fire.

16.31. Comments do not include data as to whether there would be an increase (decrease) in Cal-Train ridership.

**Response.** Daily boardings on CalTrain for the years 1993, 1998 and 2010 under all of the alternatives analyzed are contained in Table 3.1-3 in the Summary DEIR/SDEIS and repeated as Table 3.1-5 in the DEIR/Technical Appendix. For example, CalTrain ridership would increase by 9,100 under Alternative VI compared to the No Build Alternative in 2010 which is 2,600 fewer boardings than under the TSM Alternative in 2010.

16.32. No impacts [are] listed for increase in traffic exiting from Highway 280 into Trousdale and Millbrae Avenue exits and possibly into Murchison Drive.

**Response.** Please refer to Response 16.18 for a discussion of BART-related traffic using I-280 that would also travel on Trousdale Avenue and Millbrae Avenue.

16.33. No impacts [are] listed for increased traffic on Rollins Road.

**Response.** Please refer to Response 16.26 regarding traffic impacts to Rollins Road.

16.34. Loss of school tax revenues in Millbrae could be mitigat[ed] by a] provision for reimbursement of loss in ADA funds.

**Response.** BART/SamTrans will address demonstrable loss of income to school districts in accordance with state and federal relocation laws as applicable to non-profit organizations and public agencies. Please refer to the last paragraph on page 3.2-47 of the DEIR/Technical Appendix for a description of mitigation in Millbrae. Providing replacement of lost revenues to school districts by BART/SamTrans is a state education and local funding issue separate and apart from BART/SamTrans obligations as defined under the Federal and State relocation assistance laws.

16.35. BART facilities introduce scale incompatibilities in Millbrae....No mitigation was provided for.

**Response.** Certain BART facilities under the different alternatives would result in scale incompatibilities with Millbrae's existing development pattern. For the proposed project and Alternative III, scale incompatibilities result from the highway ramp connections; under Alternatives IV and V, similar impacts would stem from the Millbrae Intermodal Station parking structure, the Highway 101 ramps, and the ALRS; and under Alternative VI, scale incompatibilities have been identified between the Millbrae Avenue Station facilities and the

residences in the Bayside Manor neighborhood. Suggested mitigations in the DEIR/Technical Appendix (please refer to Section 3.3, Visual Quality) for these impacts include landscaping and redesign of parking structures. Nevertheless, the DEIR/Technical Appendix acknowledges that these mitigations would be insufficient to reduce impacts to an insignificant level.

BART is proposing to modify the Millbrae Avenue Station under the new Aerial Design Option LPA to incorporate many features of the Millbrae Avenue Station Area Concept Plan submitted by the City of Millbrae. Changes proposed relating to the parking structure include rotation of its axis 90 degrees and provision of a substantial setback from Millbrae Avenue that will be occupied by an extension of the station plaza. However, even as modified, the garage will be out of scale with the nearby residential neighborhood. With these changes, no new significant impacts were identified.

16.36.

Not sure whether plans include escalators....Escalators should be provided.

**Response.** Up and down escalators are provided for all vertical movements to and from the BART platform and CalTrain platforms at the Millbrae Avenue Station.

16.37.

Do the projections for BART usage take into consideration what should be a heavy increase in traffic from the East Bay to SFO?

**Response.** The BART traffic projections do include traffic from the East Bay to the SFIA because the MTC travel demand model is a nine-county model and includes Alameda and Contra Costa Counties in the travel forecasts. The transit projections also include riders from the East Bay traveling to SFIA, as well as other destinations served by BART, because the entire BART service area was included in the travel demand modeling effort.

16.38.

Do the projections for BART usage take into consideration what should be a heavy increase in traffic from the Peninsula to the Oakland Airport?

**Response.** The MTC travel demand model used to forecast travel in the San Francisco Bay Area includes San Mateo and Santa Clara Counties as well as the Oakland Airport so that increases in travel between the Peninsula and the Oakland Airport are included in the travel forecasts used to assess impacts in the DEIR/SDEIS.

16.39.

Will CalTrain tickets be sold at BART Station?

**Response.** The new Millbrae Avenue Station would be a combined BART/CalTrain station and could supplant some of the functions of the existing Millbrae CalTrain Station. Specific ticketing arrangements have not been finalized with the Joint Powers Board who operate CalTrain.

16.40.

Will the Millbrae SP station be closed?

**Response.** As indicated on page 2-69, paragraph two, sentence four of the DEIR/Technical Appendix, the CalTrain platform would be relocated approximately 1,000 feet north. Please refer to Response 6.24 for additional information on the Millbrae CalTrain Station.

16.41.

What happens to the present CalTrain Parking lot?

**Response.** The existing Millbrae CalTrain parking lot west of the existing tracks (with modifications included in the City of Millbrae, Millbrae Avenue Grade Separation Project) would remain. Access would be provided from the west side of the BART/CalTrain station to this parking area.

16.42. If closed, what [will be the] impact on the proposed size of the BART parking lot?

**Response.** Please refer to Response 16.41 regarding the CalTrain station.

16.43. Closure of present Millbrae station...would add even more traffic into Center Street...[and the]...present Millbrae station stop should not be closed.

**Response.** Under Alternatives IV and V, the current Millbrae CalTrain Station would be moved to the Center Street location to create a transfer point between CalTrain and BART. The analysis of intersections in the vicinity of the Center Street Station included the additional vehicles accessing this CalTrain station.

The intersection of El Camino Real and Center Street would remain at acceptable levels of service under Alternatives IV and V although the P.M. peak hour would degrade from LOS A under the No Build Alternative in the year 2010 to LOS C under Alternative IV and LOS D under Alternative V. The intersection of San Anselmo and Center Street would require a four-way stop sign to mitigate the traffic impacts under Alternatives IV and V.

16.44. Traffic [on] San Anselmo and Center Street [could reach]...LOS "E" [under] Alternative V [in] 1998 [and] LOS "[F]" in 2010...[This could be] mitigat[ed by] instal[ling an] all way stop to reduce to LOS "B" [although]...[an] all way stop could cause problems at El Camino & Center Streets.

**Response.** The distance between San Anselmo and El Camino Real on Center Street is too long for a four-way stop at the intersection of San Anselmo and Center Street to affect traffic operations at the intersection of El Camino Real and Center Street.

16.45. Alternatives IV and V do not have enough [parking] space[s]....Overflow of vehicles could result in vehicles parking in the residential areas.

**Response.** Under Alternative IV the forecast parking demand is 150 vehicles less than the number of parking spaces supplied at the Millbrae Intermodal Station. Under Alternative V the forecast parking demand is 520 greater than the supply of parking spaces. The supply of parking spaces under both Alternative IV and V is constrained because expansion of parking supply would further encroach into the Marina Vista neighborhood causing significant impacts. The mitigation under both these alternatives is to institute a Residential Permit Parking Program if spillover parking from the Millbrae Intermodal BART Station were to occur.

16.46. Alternatives IV and V [would] displac[e] 67 unit[s] 170 residents....To move people out of their homes is unacceptable.

**Response.** Alternatives IV and V would indeed result in displacement as noted in the DEIR/Technical Appendix. The impact is classified as significant and unavoidable, a designation which will require BART/SamTrans to make specific findings that the benefits of the project outweigh the effect.

16.47. Displacement of Millbrae Nursery School....Millbrae Nursery School is the oldest co-op nursery school in California (Historical Landmark) also [the] old Cypress Tree in yard....Access to remaining homes in Marina Vista would be through the stations....Driving through the station for residents [and] overflow parking going into that neighborhood [are concerns].

**Response.** The Millbrae Nursery School is not listed on the official California Historical Landmarks list (*California Historic Landmarks*, Office of Historic Preservation, California Department of Parks and Recreation 1990); the National Register of Historic Places; or the *California Inventory of Historic Resources* (Department of Parks and Recreation 1976).

At the present time, access to the Marino Vista neighborhood involves an at-grade crossing over active railroad tracks. Under Alternatives IV and V, Center Street would be depressed under the proposed Millbrae Intermodal Station. Access to this neighborhood would be comparable to present conditions.

With regard to the problem of overflow parking, please refer to Mitigation Measure 2.1, Residential Permit Parking, on page 3.1-167 of the DEIR/Technical Appendix.

- 16.48. I vote no on BART coming into Millbrae...because of the traffic problems it will cause....I don't feel our tax dollars should go toward installation of a system parallel to CalTrain [with] the number of residents and business[es] affected.

**Response.** The commentor's opposition to all of the build alternatives is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans Boards when choosing the LPA in November 1995. As noted in Response 2.7, the Alternative VI Aerial Design Option was selected as the LPA by both boards. Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are discussed in Response 79.18.

- 16.49. No one has projected what it would cost to ride BART.

**Response.** BART fares are determined using a district-wide formula. The fare calculation is based on the number of miles in the trip and applicable surcharges. With 1995 fares, a one-way trip from SFIA to the Montgomery Station would be approximately \$2.40.

- 16.50. I would like to see CalTrain improved and extended to downtown San Francisco.

**Response.** The commentor's support for the TSM Alternative is noted. The BART and SamTrans Boards have selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). As noted in Response 2.7, extension of BART to the SFIA does not preclude further improvements to CalTrain. Please refer to Response 14.92 for a discussion of the parallel CalTrain extension study.

- 16.51. [The Millbrae] depot [could] lose [its] historical impact. Station location [would be] "out-land" parking [and could] become a security problem....Incorporate into [the] design of Millbrae Avenue BART Station...displays and layout to tell [the] history of transportation at City of Millbrae. Remove BART station to:...North side of Millbrae Avenue to incorporate into transportation educational center....Or completely remove from area to preserve at historical society grounds at downtown Millbrae.

**Response.** Please refer to Response 6.24 for a discussion of the Millbrae Station. Because the building would not be moved and its use will remain the same, impacts to this building would be minimal and it is unlikely that adding its functions to the Millbrae Avenue BART/CalTrain Intermodal Station would result in an additional security problem.

- 16.52. Page 3.3-89, Item 17 [of the DEIR/Technical Appendix]: "The traction power substation and train control bungalow would be located under the elevated portion of Millbrae Ave." This takes away commercial space/open mall space from around our station area-development zone. This area should be free flowing/walking type area to connect both sides of commercial businesses of Millbrae Avenue. - Well lit, open area.

**Response.** Final design and location of the traction power substation will be addressed in the final design process, but its proposed location is not in an area where pedestrians would be expected to traverse.

16.53. Page 3.3-89, Item 18 [of the DEIR/Technical Appendix]: "Relocation of Millbrae CalTrain Station 15..."[I] believe this causes problems with historical nature of this site.

**Response.** Please refer to Response 6.24 for a discussion of the Millbrae Station. As noted in Response 6.24, under revised plans, the station would not be moved.

16.54. Change of traffic pattern in neighborhood from Rollin Road to Hillcrest [is a concern].

**Response.** The Bayside Manor neighborhood would have a new point of access to the City of Millbrae under Alternative VI and the Alternative VI Aerial Design Option. The current route of Aviador Avenue to Roblar Avenue to Garden Lane to Rollins to Millbrae Avenue would change to Aviador Avenue to Hillcrest Boulevard to El Camino Real. This new road under Alternative VI and the Alternative VI Aerial Design Option would provide the neighborhood with a better connection to the rest of the City of Millbrae but a longer route to access Highway 101.

16.55. Flooding in the underpass on Hillcrest: What type of pumping? What type of back up pumping?

**Response.** The need for a pump station at the new Hillcrest underpass of the CalTrain tracks will be developed during preliminary design. Back-up pumping for this type of installation is normally portable gasoline-powered pumps from the local jurisdiction.

16.56. [Need] Provisions for emergency entrance into Bayside if underpass is blocked.

**Response.** Access to Bayside Manor on the east side of the CalTrain tracks would be affected only by Alternative VI, which proposes a subway BART alignment alongside CalTrain. Impact 10 on page 3.13-49 in the discussion of Construction/Transportation explains that Bayside Manor access would be closed at Aviador Avenue. The proposed mitigation involves construction of a new extension of Hillcrest Boulevard to provide access to the neighborhood and to have this measure in place prior to closing access at Aviador. The current access to Bayside Manor via Aviador will remain open only for emergency vehicles to supplement the new entrance at Hillcrest Boulevard.

16.57. Maintenance of streets for extra traffic on streets if impact - Hillcrest, Millbrae Avenue, El Camino and Helen Drive.

**Response.** The added traffic on the above referenced streets resulting from the Millbrae Avenue Station under Alternative VI and the Alternative VI Aerial Design Option is not expected to have a significant impact on maintenance to those streets. Helen Drive would carry no additional vehicles under Alternative VI compared to the No Build Alternative, while El Camino Real and Hillcrest Boulevard would carry added vehicles under Alternative VI and the Alternative VI Aerial Design Option. Millbrae Avenue, between El Camino Real and Bayshore Highway, would carry many additional vehicles under Alternative VI and the Alternative VI Aerial Design Option compared to the No Build Alternative, but this added vehicular load is not expected to significantly affect maintenance requirements for this street. Please refer to Response 16.11 for a discussion of wear and tear on surface streets.

16.58. Spillover of parking into residential area [is a concern].

**Response.** Please refer to Responses 14.25 and 14.38 for a discussion of monitoring and mitigation of spillover parking into residential areas.

16.59. BART must provide...police protection at its stations and cooperate fully with local authorities in monitoring potential spillover crime into surrounding areas.

**Response.** BART police will provide police protection at all new BART stations along the proposed alignment. In addition, BART police are signatories to the California Mutual Aid Agreement in which they agree with local police along the BART system for mutual aid. Please refer to Responses 14.57 and 16.2 for a discussion of BART emergency services.

- 16.60. Traffic flow in and around BART stations would ruin the neighborhoods surrounding Center Street.

**Response.** Residential neighborhoods adjacent to the Millbrae Intermodal Station under Alternatives IV and V would be significantly affected by BART-related traffic and activities. These changes to the neighborhood are identified in Section 3.2.5, Neighborhood Impact Assessment and Mitigation, of the DEIR/Technical Appendix. While mitigation measures are suggested, the DEIR/Technical Appendix indicates that they would not be sufficient to reduce the impacts to an insignificant level. Thus, should either of these alternatives be approved, BART/SamTrans would be required to issue specific findings that the benefits of the project outweigh these significant, unmitigable impacts.

- 16.61. BART's proposed Center Street Station can in no way fit into such a residential district...The proposed Millbrae Avenue BART station holds far more promise as a possible positive addition to this already commercial district.

**Response.** The comment's preference for a Millbrae Avenue Station was considered by the BART and SamTrans Boards during the selection of the LPA at the close of the public review and comment period. Both Boards selected the Alternative VI Aerial Design Option, which includes a Millbrae Avenue Station, as the LPA. The DEIR/DEIS analyzes the impacts of both station locations.

- 16.62. Soundproofing by way of landscaping will be essential.

**Response.** Landscaping of sound walls would be done for aesthetic reasons. The floral components of landscaping, although visually appealing, generally have little or no effect on noise levels. It is a common misconception that a single row of trees would noticeably affect noise levels.

- 16.63. BART's vibration through the ground and other structures must also be held to a minimum.

**Response.** Mitigation of groundborne vibration from operation of BART trains, where necessary, will result in interior vibration levels that have been found to be acceptable to the general populace based on experience with other similar transit systems in communities throughout North America.

- 16.64. Air quality around BART stations must be monitored. The best mitigation of such a problem would, again, be proper traffic management.

**Response.** Local air quality impacts (specifically, carbon monoxide) at BART parking facilities and at roadway intersections near BART stations are analyzed in the DEIR/Technical Appendix, Section 3.10. The analysis is a conservative one, designed to predict conservative carbon monoxide (CO) concentrations; the analysis combines peak-hour traffic volumes with conservative meteorological conditions and conservative receptor locations. Predicted conservative CO concentrations do not exceed the federal or California 1-hour or 8-hour ambient air quality standards under any BART design alternative in any year that the project would be in service (1998 and beyond). Total PM<sub>10</sub> emissions are less for all alternatives than under existing conditions. Consequently, no significant PM<sub>10</sub> impacts are expected. Because local CO and PM<sub>10</sub> impacts would not be significant, ambient air quality monitoring is unnecessary.

16.65. The Center street BART proposals could seriously affect flood levels due to the re-routing of drainage canals.

**Response.** All drainage facilities that are modified or rerouted will be analyzed in the final design process and designed to provide equal or greater capacity/flood protection than the original (pre-BART) drainage facility.

16.66. The Center St. alternative...station plans are...completely incompatible with surrounding neighborhoods, Alternative VI seems the only BART plan in Millbrae that could be successfully mitigated.

**Response.** The commentor's support for Alternative VI was considered by the BART and SamTrans boards during selection of the Alternative VI Aerial Design Option as the LPA at the close of the public review and comment period (see Response 2.7). BART will commit to mitigating impacts created by the BART extension and will consider the City's concerns in fashioning its mitigation.

16.67. Assuming BART does still come to Millbrae, I could only recommend Alternative VI, as it...impacts our residential areas the least, and provides some good potential economic development opportunities.

**Response.** The commentor's support for the Alternative VI was considered by the BART and SamTrans boards during selection of the Alternative VI Aerial Design Option as the LPA at the close of the public review and comment period. (See Response 2.7 for a discussion of the selection process, and the FRDEIR/S#2DEIS for a discussion of the Alternative VI LPA.) BART will commit to mitigating impacts created by the BART extension and will consider the City's concerns in fashioning its mitigation.

16.68. I would strongly urge that BART be requested to fund the creation of..a railroad museum. This would help offset the effects of replacing the CalTrain station within the new proposed intermodal structure, thereby restoring the use of our existing historic landmark.

**Response.** Please refer to Response 6.24 for a discussion of the revised plan for the Millbrae Station.

16.69. Table 2.4-2 "Comparison of Key Impacts" [of the DEIR/Technical Appendix] appears to show that the construction of BART in San Mateo County will increase ridership on that system by 80,700 [to] 88,300, depending on the alternative chosen. However, it is clear that the DEIR/Technical Appendix shows twice the actual ridership figures estimated, as those figures are shown as entrances and exits, effectively double-counting each passenger. Therefore, the above figures would be more accurately reported as 40,350 [to] 44,150.

**Response.** Table 2.4-2, Comparison of Key Impacts, in the DEIR/Technical Appendix includes a row titled "Daily BART Patronage in San Mateo County in 1998 (entrances and exits)." Under the LPA column, the number 80,700 represents total patronage in San Mateo County in 1998 on BART and not the increase in ridership. Although a patronage number does represent entrances and exits, this number cannot simply be divided in half to represent boardings if the patronage number is for a relatively small segment of the entire transit system. The portion of the patronage number, e.g., 80,700 in Table 2.4-2, representing exits were boardings on BART external to San Mateo County in most cases. Only those trips made on BART within San Mateo County should be divided if attempting to estimate boardings from the Daily BART Patronage row in Table 2.4-2. Please note that the row above this one does list "Increase in Daily Regional Ridership (passengers compared to No Build in 1998.)"

16.70. In that same table [Table 2.4-2 of the DEIR/Technical Appendix], the first row under the column entitled Alternative II TSM, shows a projected increase of only 2100 passengers for Daily Regional Ridership figures. However, the DEIR contradicts itself by showing, on page 2-31, that CalTrain service would be expanded to 86 trains in each direction. This is an increase of 26 trains in each direction, each day....[I]t [is] obvious that the TSM alternative is expecting to haul 15,600 (26 trains x 4 cars/train x 150 passengers/car) more passengers each direction. Since the statistics for the BART alternatives appear to count passengers traveling in each direction, as stated in the above paragraph, we need to double the figure of 15,600 to get 31,200.

**Response.** BART ridership is forecast to increase by 2,100 boardings when compared to the No Build Alternative in 1998. CalTrain ridership is forecast to increase by 14,700 boardings compared to the No Build Alternative in 1998. This increase in CalTrain boardings in 1998 under the TSM Alternative is for the entire CalTrain system and includes both directions of travel. Please note that the row with Increase in Daily Regional Ridership in Table 2.4-2, Comparison of Key Impacts, in the DEIR/Technical Appendix has volumes with the increased boardings for the entire BART system while the row with Daily BART patronage in San Mateo County has volumes with total entries and exits for a portion of the BART system. Please refer to Response 16.69 for further discussion of comparing number of boardings for the entire transit system to patronage numbers for a portion of the same transit system.

16.71. The DEIR should discuss the inconsistencies between the project's goals and objectives and the proposed alternatives and explain what measures will be taken to reconcile the inconsistencies to the goals and objectives of the project. Alternative VI (Millbrae Avenue Station) in its present form is inconsistent with a number of these goals and objectives.

**Response.** Please refer to Response 14.7 for a discussion of the project alternatives' consistency with project goals and objectives.

As a whole, Alternative VI rates "high" in fulfilling seven of the eight goals for the project. The Millbrae Avenue Station is one of a number of major components that make up the Alternative VI alignment. Each alternative was developed to fulfill the goals and objectives of the project. Not all alternatives, or the differing components of each, would be able to fulfill the goals and objectives to the same degree. The following describes how the Millbrae Avenue Station component of Alternative VI affects the alternative's fulfillment of the projects goals and objectives.

**Mobility.** As a component of Alternative VI, the Millbrae Avenue Station would contribute to providing safe and efficient movement of people within the project corridor. The Millbrae Avenue Station would help to relieve overall roadway congestion by providing an alternative to single-occupancy automobile usage. It would also serve as a local and regional transit system link.

**Environmental Considerations.** The Millbrae Avenue Station contributes towards meeting the three objectives of supporting the Clean Air Plan, minimizing adverse impacts to natural resources, and minimizing impacts due to natural hazards. The station does, however, have some adverse effects to the built environment. Construction of the Millbrae Avenue Station would worsen LOS at El Camino Real/Millbrae Avenue, introduce scale incompatibilities, and relocate the Millbrae Gardens neighborhood.

**Land Use and Development.** As discussed in Response 14.7, Alternative VI best achieves the goal of integration with adjacent land uses and planned development. The Millbrae Avenue Station would encourage private investment and commercial activity in existing and planned activity centers. The station would, however, disrupt the existing land uses. It would displace 208 residential units and 525 residents, as shown in Table 3.2-3 of the Summary DEIR/SDEIS.

The Millbrae Avenue Station also would introduce facilities that would be out of scale with existing development. Access between the Bayside Manor neighborhood and the Millbrae Avenue Station would not be available, thus minimizing parking spillover and traffic impact to this neighborhood.

*Financial Feasibility.* Please refer to Chapter 6 of the Summary DEIR/SDEIS for discussions on financial feasibility of Alternative VI.

*Equity.* Alternative VI rates “high” in terms of meeting the overall goal of providing a transportation system that effectively meets the needs of all social groups, although implementation of the Millbrae Avenue Station impacts a low-income neighborhood.

*Community and Institutional Considerations.* Overall, Alternative VI is rated “medium” on community and institutional considerations. The Millbrae Avenue component of Alternative VI is consistent with federal, state and regional goals, although it conflicts with the Millbrae General Plan. However, the City of Millbrae has passed resolutions in support of Alternative VI with certain design mitigations.

*Effectiveness.* The station as a component of Alternative VI would provide an effective addition to the regional transit system. It would meet the objectives of providing intermodal connections and maximizing ridership. MTC forecasts that the Millbrae Avenue Station would have a daily patronage of 33,600 in the year 2010. The station also would provide direct access to commuters from the south via the Highway 101/Millbrae Avenue interchange.

*Operational Efficiency.* The Millbrae Avenue Station would be a BART/CalTrain/SamTrans intermodal station, which would provide for efficient transit operations and minimized travel times.

- 16.72. The proposed Millbrae Avenue Station will have a significant impact on the existing [built] environment, but no mitigation measures are proposed to reduce this impact to insignificant levels.

**Response.** Impacts to the built environment are described in Chapter 3, Section 3.3, Visual Quality, of the DEIR/Technical Appendix. Impact 16 on page 3.3-89 acknowledges that the Millbrae Avenue Station would be incompatible in scale with homes in the Bayside Manor neighborhood. It is further acknowledged that scale incompatibility impacts would remain significant.

- 16.73. Under its present configuration, the proposed Millbrae Avenue Station will displace both residential and commercial/industrial land uses....These lands are located within the redevelopment area, and their elimination will have a significant effect on the redevelopment plans for the area.

**Response.** Millbrae Avenue BART Station Area Concept Plan projects an overall increase in sales tax revenues as a direct result of the BART station location in Millbrae. Because of the synergy that a BART station creates through joint development opportunities, BART and SamTrans expect that the City’s tax base will increase, private dollar investments will pay for increased infrastructure investment, and City services will increase (Capitalization of Transit Investments into Single-Family Home Prices; by John Landis, Subhrajit Guhathakurta, and Ming Zhang; University of California, Berkeley; Institute of Urban and Regional Development; July 1994). BART and FTA policy encourage joint development participation at and around BART stations.

- 16.74. The increased traffic resulting from the construction of the Millbrae Avenue Station as presently proposed will have a significant impact on the immediate surroundings and permanently change the character and environmental qualities of the area.

**Response.** The bulk of the added traffic volume (over 70 percent) under Alternative VI and the Alternative VI Aerial Design Option compared to the No Build Alternative is between the Millbrae Avenue Interchange of Highway 101 and the Rollins Road entrance to the Millbrae Avenue Station. Please refer to the Responses 16.18 through 16.24, for a discussion of the traffic impacts to local residential streets in the City of Millbrae under Alternative VI and the Alternative VI Aerial Design Option. The environmental effects of these changes in traffic volumes are discussed in Response 16.80.

- 16.75. The proposed Millbrae Avenue four-story parking structure will loom over the predominantly single story, single family residential neighborhood. The proposed parking megastructure is totally out of scale, not only with immediate neighborhood, but the City as a whole.

**Response.** The parking structure at the Millbrae Avenue Station would be larger in scale than other buildings in the vicinity under both Alternative VI and the Aerial Design Option LPA. Please refer to Responses 16.35 and 16.72 for a discussion of this impact.

- 16.76. As previously proposed, the Millbrae Avenue Station is unacceptable to the community. Major revisions addressing the concerns of the community will have to be made to the plans in order for the proposed project to gain community acceptance of this alternative.

**Response.** The FRDEIR/S#2DEIS issued for comment in September 1995, included a major redesign of the Millbrae Station to respond to the majority of the issues raised by the City of Millbrae in their formal comments to the DEIR/SDEIS. BART's present station proposal is more responsive to the City's plans for the station area development.

The plan illustrated in the FRDEIR/S#2DEIS accommodated all City recommendations east of the railroad right-of-way including a new access road under the new Millbrae Avenue overpass to Adrian Road. City-recommended improvements west of the railroad right-of-way have not been incorporated in the BART project since the primary transportation requirements are accommodated in the development east of the tracks and land acquisition costs, and impacts on existing businesses were determined to be beyond the available funding levels of the project for this station development. Furthermore, displacement of selected businesses would result in significant new unavoidable impacts associated with Environmental Justice which were determined to be beyond the scope of the BART project.

BART has agreed to contribute financially to a future mitigation plan that may be undertaken by the City of Millbrae for work west of the railroad right-of-way based on a formula associated with traffic mitigation measures for the Millbrae Avenue El Camino Real intersection.

- 16.77. More emphasis should be placed on developing the potentials of CalTrain and SamTrans as feeders to BART to achieve the subregional and regional transportation goals.

**Response.** The transfer volumes between BART and CalTrain and between BART and SamTrans buses as summarized in Table 3.1-7, Daily Intermodal Transfers Between Rail Services, in the DEIR/Technical Appendix, are based on MTC's travel demand model, as required by FTA regulations. SamTrans service was altered to create more feeder buses in BART stations and CalTrain service was also increased. Further increases in SamTrans and CalTrain service do not appear to be justified according to the results of MTC's mode choice model.

- 16.78. There is no analysis of the potential traffic impacts on the local residential streets, particularly those connecting I-280 with El Camino Real, such as Trousdale, Murchison, Millbrae Avenue and Hillcrest Boulevard.

**Response.** Please refer to Response 16.18 for a discussion of traffic impacts on Trousdale Avenue, Murchison Drive, Millbrae Avenue, and Hillcrest Boulevard.

16.79. The DEIR/SDEIS recognizes that the Millbrae Avenue Station will provide relief to the stations located north of Millbrae. Traffic diverted from these stations traveling north along I-280 will filter through the local streets.

**Response.** Traffic accessing the Millbrae Avenue Station from I-280 would primarily use Trousdale Avenue as opposed to Millbrae Avenue, Hillcrest Boulevard or Murchison Drive. Please refer to Response 16.18 for a discussion of impacts to these local streets. Traffic on I-280 to or from a BART station is also projected to use the Tanforan Station.

16.80. Increased traffic on these local streets [connecting I-280 with El Camino Real, such as Trousdale Drive, Murchison Drive, Millbrae Avenue, and Hillcrest Boulevard] will increase automobile emissions along this corridor, further contributing to the degradation of the air quality and the livability of the residential areas.

**Response.** The BART project would result in an increase in vehicular traffic on local streets between I-280 and El Camino Real, including Trousdale Drive, Murchison Drive, Millbrae Avenue, and Hillcrest Boulevard. An increase in traffic on these local streets would result in an increase in vehicular emissions, which in turn would cause a decrease in local air quality. This effect on local air quality is addressed in the DEIR/Technical Appendix, Chapter 2, Section 3.10, which concludes that vehicular emissions of carbon monoxide (CO) at roadway intersections and BART parking structures would not produce significant air quality impacts under any BART design alternative in any year that the project would be in service (1998 and beyond), and that local PM<sub>10</sub> impacts are not significant.

Intersections in the above mentioned corridor that were included in the EIR traffic analysis are El Camino Real/Hillcrest Boulevard, El Camino Real/Millbrae Avenue, El Camino Real/Murchison Drive, El Camino Real/Trousdale Drive, and El Camino Real/Broadway. Of these intersections, El Camino Real/Millbrae Avenue and El Camino Real/Broadway have the highest predicted traffic volumes and worst predicted levels of service under any of the build alternatives. These two intersections would therefore suffer the most severe air quality impacts of the intersections and street segments in the corridor. For this reason, these intersections were selected for local CO analysis.

The analysis of local CO impacts is a conservative one; the analysis combines peak-hour traffic volumes, worst-case meteorological conditions, and worst-case receptor locations, and compares the results (predicted CO concentrations) to federal and state ambient air quality standards that are established at conservative, health-based levels. The predicted worst-case CO concentrations at El Camino Real/Millbrae Avenue and El Camino Real/Murchison Drive do not exceed federal or California ambient air quality standards under any BART build alternative in any year the project would be in service (1998 and beyond). Therefore, although the project would result in some finite decrease in local air quality in the corridor, the resulting local CO concentrations would not have a deleterious effect on the "livability" of these residential areas.

Total PM<sub>10</sub> emissions are less for all alternatives than under existing conditions. Thus, although there may be some slight increase in PM<sub>10</sub> emissions at particular locations, no significant PM<sub>10</sub> impacts are expected and the "livability" of the identified areas should not be affected.

16.81. The proposed Millbrae Avenue station will generate significant criminal activities, not only within the BART station, but around the peripheral areas near the station and beyond to the residential neighborhoods...Mitigation measures to ameliorate impacts created by the proposed project should be the responsibility of the proponents of the project, and not absorbed by the local communities. BART should consider subsidizing the local communities to provide the additional police services required as a result of the implementation of the proposed project.

**Response.** Please refer to Responses 14.57 and 16.2 for a discussion of crime and emergency response times around BART stations and BART's responsibilities for addressing the potential for increased incidents of crime.

- 16.82. The analysis should include statistical data of the existing crime rate within the project area to serve as a base line to compare with that of an existing station similar to the proposed Millbrae Avenue station.

**Response.** The change in the demand for services for local police has been identified by local jurisdictions served by BART as within the capacity of existing staffing and equipment. While this information may not be directly applicable to Millbrae, since each city's local circumstances differ, it does suggest that the change in several communities (i.e., Daly City, El Cerrito, and Richmond) are not inordinately greater than existing levels. The collection of existing statistical crime data may be one measure of baseline conditions. If, for example, increases in auto theft or burglary were reported on BART premises, they would be responded to by BART police. Thus, the incidence of crime would have increased, but the calls for service would not change.

- 16.83. The proposed Millbrae Avenue 3,000 space, four-story parking structure will have a significant adverse impact on the aesthetic qualities of the community.

**Response.** Please refer to Responses 16.35 and 16.72 for a discussion of Millbrae Avenue Station visual impacts.

- 16.84. The proposed Millbrae Avenue parking structure is inconsistent with the goals and objectives enumerated on page 1-9 of the DEIR, which state that potential adverse impacts on the built environment be minimized, that disturbances to neighborhood character resulting from significant changes in traffic flow and introduction of facilities that are out of scale with existing development be minimized, and that the community acceptance and political and institutional support for the project be maximized. The project in its present form cannot be reconciled with the goals and objectives of the project. Mitigation measures, such as scaling down the size of the parking structure and designing the structure contextually with the low profile character of the community should be implemented.

**Response.** Please refer to Response 16.71 for a discussion on the proposed Millbrae Avenue Station's consistency with the goals and objectives of the project. Although this component of Alternative VI may conflict with some of the goals and objectives, it is consistent with others. BART intends to work cooperatively with all of the affected communities in refining the design and layout of station facilities.

- 16.85. The discussion of the impacts of the project on the residential areas is inadequate and contains errors. This section should be rewritten to correct the errors and to facilitate the understanding of the potential impacts. A relocation plan should also be included with the document.

**Response.** The commentator does not identify any specific errors in this section. A relocation plan must be developed by BART/SamTrans before the project can begin, but the plan will not be part of this FEIR/FEIS.

- 16.86. The people of San Mateo County would be best served by the extension of CalTrain to Market Street, a feeder service from CalTrain to the airport, and a no build for BART....There is no reason to spend approximately \$1 billion to put into place a mass transit system that does not have the capability of moving large numbers of persons as does CalTrain, which...is in place and currently undergoing upgrading....All of the alternatives would create significant impacts that cannot be mitigated....It seems ludicrous to ask Congress to appropriate funds for something we can do without.

**Response.** The commentor's opposition to all of the build alternatives is noted. Please see Response 79.18 for a discussion of the studies conducted evaluating various proposals to extend BART to the Airport. Based on these studies, transit improvements beyond those provided by CalTrain alone are required to adequately serve Peninsula travel needs. The BART and SamTrans boards have selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the selection process). As noted in Response 2.7, extension of BART to the SFIA does not preclude further improvements to CalTrain.

- 16.87. What about the cost of Police and Emergency response when the hoards of people come to the station and create situations needing these services? Who will pay for this?

**Response.** As noted in Responses 14.57, 14.94 and 16.2, BART police will assume primary responsibility on BART premises, but may call upon local jurisdictions in emergency situations; local communities will bear the cost of increased service outside the BART station and parking areas.

- 16.88. BART's approach into our city will...be a small step in the future development of our community. I support BART's Alternative VI.

**Response.** The commentor's support for the Alternative VI was considered by the BART and SamTrans Boards during selection of the Alternative VI Aerial Design Option as the LPA at the close of the public review and comment period (see Response 2.7). BART will commit to mitigating impacts created by the BART extension and will consider the City's concerns in fashioning its mitigation.

- 16.89. The No Build Alternative impacts Millbrae because the traffic caused by the SFO Airport expansion will virtually eliminate access to Millbrae....New rail transit service is the only answer to this significant traffic impact.

**Response.** The commentor's concerns regarding the No Build Alternative are noted. Please refer to Response 2.7 for a discussion of BART/SamTrans' selection of the LPA.

- 16.90. The TSM alternative does not work for Millbrae because, as much as the City supports the extension of CalTrain to Downtown San Francisco and the upgrade of CalTrain service to rapid transit levels, the extension, upgrade, and electrification of CalTrain is underfunded by \$1.11 billion.

**Response.** The commentor's concerns regarding the TSM Alternative are noted. Please refer to Response 2.7 for a discussion of BART/SamTrans' selection of the LPA and the implications of the BART project for future service by CalTrain.

- 16.91. The Base Case and prior Locally Preferred Alternative (LPA) significantly impact an enormous area of wetlands and open space which cannot be replaced.

**Response.** The DEIR/SDEIS documents the extent of disturbance to biological resources for each alternative. The relatively large amount of wetlands and endangered species habitat affected under the 1992 LPA and Alternative III was an important consideration in selecting a different alternative as the new LPA. BART has sought to avoid wetlands and endangered species while developing a feasible and practicable alternative.

- 16.92. Alternatives IV and V(B) are...adverse to the quality of life for the residents in north Millbrae neighborhoods, and the elementary and nursery schools. The station at Center Street, besides the traffic, infrastructure, noise, air quality, and safety issues that also exist under the Base Case and LPA, is simply very bad land use planning and will irrevocably disrupt the social fabric of the neighborhoods.

**Response.** The commentor's opposition to Alternative IV and Design Option V-B is noted and was considered by the BART and SamTrans boards in the selection of the Alternative VI Aerial Design Option as the LPA at the close of the public comment period. The approval of a particular BART extension alternative will not occur until after completion of the environmental review process and further evaluation of the project's economic and funding viability, environmental implications, and engineering feasibility. Please refer to Response 116.4 for a discussion of impacts of the Millbrae Center Street Station under Alternative IV and V.

16.93.

The City requests that the FEIR/FEIS incorporate the Concept Plan Station layout, as mitigation to reduce the significant, unavoidable traffic impacts at the Millbrae Avenue/El Camino Real intersection...Technical information from the DEIR/SDEIS indicates that the Millbrae Avenue/Rollins Road intersection operates at LOS B during the afternoon peak. However, observations of traffic flow during the morning and evening peak hours indicates that there are existing traffic problems at this intersection....The City requests that the FEIR/FEIS provide a more detailed operations analysis of the Millbrae Avenue/Rollins Road intersection to adequately identify traffic impacts at this intersection and to mitigate such traffic impacts....The Millbrae Avenue/Rollins Road intersection will be the primary access point to the BART station for buses, passenger drop off and for the 3,000-space BART parking garage....The City requests that the assumptions and impacts of the daily trip generation analysis on the Millbrae Avenue/Rollins Road intersection be presented in the FEIR/FEIS, so that the City can identify the true extent of traffic impacts at this intersection and identify appropriate mitigation measures for these impacts.

**Response.** The planning methods of analyzing impacts to intersections included in the DEIR/SDEIS are appropriate for EIRs and EISs. Please refer to Responses 6.6, 10.18, 16.35 and 16.76 for information on the Millbrae Avenue/El Camino Real intersection and the City of Millbrae Concept Plan Station layout.

Capacity improvements by the addition of left turn lanes to the north leg of Rollins Road and the east leg of Millbrae, would improve the operations at the Millbrae Avenue and Rollins Road intersection. The appendices to the Transportation Technical Report contain the calculation sheets for this intersection as well as all the intersections analyzed. These calculation sheets include the assumptions used to derive the levels of service. The number of persons accessing a station are contained in Appendix B of the DEIR/Technical Appendix. For example, Table B-40, Alternative VI Access to BART Stations by Mode contains this information for Alternative VI. Please note that Table B-40 has been revised and is provided following Response 10.12.

16.94.

Under year 2010 traffic levels, conditions would deteriorate to LOS F as a result of BART trips in both the morning and afternoon peak hours. This is a significant impact caused by the cumulative impact of the BART project, which must be mitigated as part of Millbrae Avenue BART station. The DEIR/SDEIS does not provide any analysis of conditions at the Bayshore Freeway/Millbrae Avenue interchange as a result of the proposed project....The City requests that the assumptions and result of the daily trip generation analysis for the Bayshore Freeway/Millbrae Avenue interchange be prepared and included in the FEIR/FEIS and that the Concept Plan interchange partial-cloverleaf (PAR-CLO) design be included in the FEIR/FEIS as a fully funded mitigation for significant traffic impacts at the Bayshore/Millbrae Avenue interchange.

**Response.** Please refer to Response 10.17 for a discussion of possible mitigations measures for the Millbrae Avenue Interchange of Highway 101 under Alternative VI.

16.95.

The DEIR/SDEIS does not include a review of the station design [including the ramp connection to the Millbrae Avenue overpass], nor does it analyze impacts or mitigation measures. The City recognizes that the plans presented in the Design Appendix are conceptual, subject to further refinement and preliminary engineering design. However, one of the fundamental purposes of the DEIR/SDEIS is to identify potential significant impacts. If the BART station design is functionally inadequate at the conceptual stage, these issues must be resolved with the City before further design proceeds....The City requests that the FEIR/FEIS include a review of the impacts of

the station traffic operations and consider the Concept Plan station layout as mitigation of those impacts and fully fund those mitigation measures.

**Response.** Impacts of the station designs are studied in the BART–San Francisco Airport Extension DEIR/SDEIS, including the traffic impacts. As a result of reviewing the City of Millbrae's Concept Plan for the station layout, many of its elements have been incorporated into the revised plan for the Millbrae Avenue Station. Direct ramp connections between the southbound diagonal off-ramp from Highway 101 to the Millbrae Avenue Station are not required for the project because few vehicles would be expected to access this station from the southbound off-ramp. Please refer to Responses 16.35 and 16.76 for further discussion on the Millbrae Avenue Concept Plan.

16.96. The station plan layout does not clearly indicate if the pedestrian overcrossing for the BART/CalTrain tracks is located within or outside of the paid station area. In order to make the station truly multimodal, the City requests that a pedestrian and bicycle crossing provide free access across the tracks for the general public, in order to mitigate the access barrier that would be created by the BART tracks.

**Response.** Free pedestrian access through the Millbrae Avenue Station will be permitted to allow the public right-of-way over the BART/CalTrain tracks. Bicyclists will be required to walk with their bicycles through the station.

16.97. While the proposed BART station plan appears to have surplus parking, it is apparent that there is not sufficient surplus capacity on Millbrae's existing circulation system to accommodate any variance in modal split estimates. The DEIR/DEIS expresses deep reservations about the accuracy of the modal split model. Millbrae shares those reservations that the model is not accurate and impacts to the roadway system are wholly understated. The City requests that the FEIR/FEIS provide a sensitivity analysis of potential changes in transit use forecasts to determine if these estimates should be revised to provide a more accurate evaluation of local parking and circulation impacts. The mitigation of these impacts must be fully funded.

**Response.** The DEIR/SDEIS does not express any reservations about MTC's mode choice model. Further, BART is required by law to use the regionally accepted travel demand model which includes the mode choice model. At the time the transportation analysis was performed, no other accepted models for San Mateo County existed. The supply of parking at the station and the roadway improvements to be performed must be based on the highest standards of professional practice and have been designed as such. While a sensitivity test could be performed, the assumptions used to conduct this test would be speculative and the resulting design and required mitigations would be purely theoretical.

16.98. The BART [Millbrae] station design, as proposed, would: 1) Preclude opportunities for joint and/or private development by using most of the station property for the parking structure. By doing so, the City of Millbrae will lose an opportunity to create and attract development; 2) Conflict directly with the City's economic development goals, as delineated in the City Council adopted Commercial Revitalization Strategy (November, 1994); 3) Limit development in close proximity to transit; and 4) Limit the City's ability to create attractive investment opportunities for the private sector by not enhancing the image and identity of the Millbrae station area, and by discouraging revitalization of nearby downtown Millbrae...In accordance with Resolution 2837, the City requests that BART work cooperatively with the City and its Redevelopment Agency to implement the Millbrae Avenue Station Area Concept Plan.

**Response.** Please refer to Responses 14.49 and 16.73 for a discussion of development activity around BART stations. BART will work with the City to maximize opportunities for station-related development if that is the City's desire. Using a parking structure will be less limiting to development than acquiring additional land for surface parking. As noted in Responses 10.18, 16.35, 16.76, and 16.101, BART intends to modify the station design to incorporate some of the City's suggestions.

16.99. The City of Millbrae requests that the project fund a Housing Trust Fund, which would be administered in coordination with the City's Redevelopment Agency Housing Fund, in order to maximize relocation and opportunity for the residents of the Garden Lane Apartments. Further, the Millbrae Redevelopment Agency is working with property owners to the west of the Millbrae Avenue Station site to develop new replacement affordable housing in a "transit village" concept. The Agency requests that the project assist the Agency in securing Federal Transit Village grants as mitigation for the loss of affordable housing in Millbrae.

**Response.** The BART/SamTrans relocation plan will determine whether replacement housing must be provided, as described in the mitigation measure under low cost housing on page 3.2-62 of the DEIR/Technical Appendix. Please refer to Response 16.16 for a discussion of relocation assistance.

16.100. The City requests that the Millbrae Avenue BART station be developed in a manner that is consistent with City policies, and that the Concept Plan station layout...be incorporated into Alternative VI as mitigation in the FEIR/FEIS.

**Response.** Please refer to Response 16.76 for a discussion of the Millbrae Avenue Station.

16.101. The proposed BART station layout directly conflicts with the Livable Communities Initiatives program. It does not provide for the coordination of land use and services planning with public transit. The BART station layout has been developed without any serious consideration of joint development and station area development opportunities by the private sector.

**Response.** All proposed station area layouts were reviewed by and discussed with local representatives. BART has worked closely with local representatives to define the station area configuration to also meet BART/SamTrans station area requirements. Since release of the DEIR/SDEIS, BART has had ongoing discussions with Millbrae staff and had an opportunity to consider Millbrae proposals for refinements to the Millbrae Avenue Station. As discussed in Response 16.35, BART intends to modify the station layout to accommodate some of the suggestions by City staff that support joint development and station area development opportunities by the private sector.

California Drive and Adrian Road are planned to be extended to the station under the Millbrae Avenue overcrossing, providing good vehicular and pedestrian access to the industrial and commercial areas south of Millbrae Avenue. The planned surface BART parking along the Millbrae Avenue frontage could provide later opportunity sites for joint development over the BART parking. Low intensity commercial uses along El Camino Real would not be directly affected by station construction, also providing opportunity sites for later intensification.

16.102. While relocation assistance will aid displaced business, it will not replace the City's permanent loss in tax revenues. Given the limited fiscal resources of cities such as Millbrae, permanent loss in tax revenue will eventually result in physical deterioration of City infrastructure and decrease public services. This is an adverse impact that must be mitigated.

**Response.** Please refer to Response 16.73 for a discussion of changes in a community's fiscal situation as a result of a BART station.

16.103. The Concept Plan station layout would promote community cohesion and local economic activity in the station vicinity...On page 4-12 of the DEIR/SDEIS, there is no discussion of the long-term adverse impacts that would occur due to the lost development opportunities. The proposed BART station layout precludes development on the BART station sites, resulting in a lost "window of opportunity" for economic development in the City of Millbrae.

**Response.** Please refer to Responses 16.35, 10.18 and 16.101 for a description of changes to the BART station design that foster rather than preclude development opportunities.

- 16.104. The proposed BART station design does not allow for efficient land use patterns that would minimize the amount of land needed for the BART station. First, the proposed BART design would commit 15.6 acres of land for exclusive parking and station use. Second, the BART station layout does not encourage land use mixes that allow for shared uses and, therefore, less irreversible commitments to infrastructure requirements (e.g., parking, utilities and open space).

**Response.** Please refer to Responses 16.35 and 16.101 for a discussion of changes to the BART station design that encourage a mixture of land uses.

- 16.105. The City requests that the Concept Plan station layout be used as mitigation in the FEIR/FEIS to reduce significant and unavoidable scale incompatibility impacts...[Also,] Pages 3.4-7 [through 3.4-9] of the DEIR/SDEIS state that the project would have [a] direct significant impact on the existing CalTrain Station, which would be relocated under Alternative VI....The landscaping and architectural details of the BART station should incorporate this historical theme, and include a railway/transit museum in its design as mitigation to reduce the significant impact that the BART station and parking structure will have on the historical CalTrain station.

**Response.** Visual and cultural impacts are addressed in the DEIR/Technical Appendix in Section 3.3 and 3.4, respectively. Please refer to Responses 10.18, 16.35 and 16.76 regarding incorporation of visual and design elements of the City's proposed Concept Plan in the BART station. The suggestion that BART incorporate the local historical theme of railroad transit into the landscaping and architectural details of the Millbrae BART Station will be considered as part of station design in consultation with the City of Millbrae. Please refer to Response 6.24, for a discussion of the revised plans for Millbrae CalTrain Station.

- 16.106. Pages 3.5-5 through 3.5-9 of the DEIR/SDEIS do not address problems of safety and security associated with the proposed parking facility...Generally, multi-level garages are more difficult to patrol than surface lots because of restricted surveillance, and often result in higher crime, particularly auto-related incidents. Also, patrons perceive garages as being less safe, due to enclosed walking distances, lighting, and restricted views.

**Response.** The pages identified by the commentor describe the existing conditions for law enforcement and are not intended to define police requirements with implementation of the proposed BART extension. This scenario is addressed in the impact discussion, beginning at page 3.5-9 of the DEIR/Technical Appendix. While garages are not singled out specifically, they are inherent in the discussion beginning on page 3.5-12, which generally deals with police requirements for BART facilities. During final design, BART will incorporate a variety of security measures to deter opportunities for crime and enhance a sense of safety and well being for BART patrons throughout the station and parking areas. These measures include the installation of safety cameras, emergency call boxes, and the deployment of two community service assistants (CSAs), one per shift, for each parking facility that is built. The CSAs will monitor the safety cameras and will be mobile in order to administer the facility and respond to emergency situations.

- 16.107. The DEIR/SDEIS states that Alternative VI would result in an increased demand for local police, fire and emergency services (page 4-12), but does not provide mitigation to reduce service burdens on local jurisdictions. According to the DEIR/SDEIS document, this would be a long-term, unavoidable adverse effect. The City of Millbrae cannot incur additional service costs to provide BART service without creating revenue generating opportunities to offset these costs.

**Response.** Please refer to Responses 14.57 and 16.2 for a discussion of impacts on local police, fire and emergency medical services. The assessment of Alternative VI presented in the DEIR/SDEIS identifies an increased demand for local police, fire and emergency services. This demand in other jurisdictions served by BART has not required additional staff and equipment

(see DEIR/Technical Appendix, pages 3.5-27 and 3.8-28). Please refer to page 3.5-9, where it is clarified that impacts to community services are not physical environmental impacts. Under CEQA, mitigation is required only for significant environmental effects, which are defined as substantial adverse changes to the environment. "Environment" means the physical conditions which exist within the area.

16.108. The DEIR/SDEIS does not address the implication of providing primary access to the Millbrae Avenue station through one intersection, Millbrae Avenue/Rollins Road. In the event of an accident or other blockage, this intersection could impede emergency medical or fire service access. This potential impact should be addressed in the FEIR/FEIS.

**Response.** As noted in Responses 16.35 and 16.101 BART is proposing a revised concept plan for the Millbrae Avenue Station. The revised plan includes two access points into the BART station and parking area, one from Rollins Road and one from a new road along the east side of the CalTrain tracks that would extend to and connect with Adrian Road. This second access point would also allow emergency response vehicles to reach the station area.

16.109. No consideration was made of the impacts on the Serra Convalescent Facility (page 3.9-13 and page 3.9-17 [of the Summary DEIR/SDEIS]). Because this facility is immediately adjacent to the proposed BART station and the subway portal, acceleration and deceleration of the trains as they approach and leave the station may contribute to both airborne and groundborne noise at the facility. The environmental impacts would be significant and adverse....The City requests that the FEIR/FEIS include an analysis of noise impacts on the nursing facility and include appropriate mitigation to this sensitive receptor.

**Response.** Serra Convalescent Hospital would be 210 feet from BART's alignment in Alternatives IV, V and VI. None of the other BART build alternatives extend this far south; consequently, they would have no effect on the convalescent hospital. For Alternatives IV and V, trains operating on the tailtracks would be operating at slow speeds, and there would be no significant noise or vibration impacts. For Alternative VI, trains decelerating into/accelerating from the Millbrae Avenue Station would still be at a low enough speed so that no significant noise or vibration impacts would occur.

16.110. The project is inconsistent with Transportation Control Measures (TCMs) 18 and 19 of the Regional Transportation Plan (RTP)....The DEIS/DEIR fails to discuss the direct and proven correlation among higher density development near transit, efficient land use patterns, reduced vehicle miles traveled (VMT), and reduced air quality emissions. In the case of Millbrae, the proposed BART station plan would substantially preclude opportunities for the City to use the land use and air quality strategies outlined in the RTP.

**Response.** The commentator claims that the DEIR/SDEIS is deficient for failing to discuss particular benefits normally attributed to transit improvements. In fact, those very same benefits are described in Table 1-2 of the DEIR/Technical Appendix as goals of the proposed BART extension. In addition, many of these potential benefits are used as significance criteria to determine potential land use and economic impacts of the project alternatives, where failure to satisfy these goals is a reason for identifying a significant adverse effect and where support of these goals is a reason for identifying a beneficial effect.

TCM 18 of the RTP calls for local jurisdictions to zone for higher density land uses near transit, and TCM 19 calls for local jurisdictions to prepare Air Quality Elements as components of their general plans. It should be noted that both of these measures are to be implemented by local jurisdictions; BART has no zoning authority nor any ability to prepare an Air Quality Element for a local municipality. Rather than thwart local ability to comply with the Regional Transportation Plan, the proposal for a BART extension actually enables local communities to implement TCM 18 and incorporate improved transit as an aspect of TCM 19. In the absence of the BART extension (i.e., the No Build Alternative), there is no transit facility around which will intensify land use activities. Thus, the claim that the proposed BART station would substantially preclude

opportunities to use the land and air quality strategies outlined in the RTP appears misdirected. To further the objectives of TCMs 18 and 19, BART and SamTrans will continue to have discussions with the City throughout preliminary engineering and final design on how to improve the station plan. The relationship between VMT and air emissions is described in Section 3.10 of the DEIR/Technical Appendix.

The City has proposed its own station area concept plan as an alternative to the station layout proposed by BART. BART has subsequently incorporated many of the City's station layout features as part of the LPA (see Volume IV for the station drawings). Specific features of the station design that support TCM 18, as well as the City's economic development and downtown revitalization policies, are noted below:

- redistribution of parking creates development sites adjacent to the transit station;
- redesign of station facilities frees up land for joint development;
- redesign of station layout provides maximum opportunity as a development catalyst, thereby enhancing consistency with both City policies and FTA's Livable Communities Initiatives; and
- station redesign provides opportunity to promote higher density, mixed use development near transit.

16.111. Locally funded improvements should be reflected as a local match to the overall project, since without these improvements, the BART project would be obligated to fund such improvements as mitigation for the cumulative adverse impacts it would cause to this location. The City requests that the FEIR/FEIS include a breakdown of project funding including commitments for all funding sources. Full funding for the mitigation plan for each alternative must be established as an essential element of the project cost.

**Response.** While a mitigation monitoring plan will be prepared and used as a basis to determine the costs of mitigation, the proposed financial plans in the DEIR/SDEIS and in the FRDEIR/S#2DEIS do not include locally funded improvements. Most elements of locally funded BART-related projects are locally desired enhancements, not mitigations for impacts or elements required for engineering reasons, and therefore are not included in capital cost totals for the project.

16.112. The City of Millbrae recommends that Alternative VI be adopted as the Locally Preferred Alternative only if the Millbrae Avenue station layout is substantially revised as presented in the Concept Plan in the Final EIR/Final EIS along with the other mitigation measures which are identified in Appendix C, and that the entire Mitigation Plan is fully funded concurrently with the opening of the Millbrae Avenue BART station. Otherwise, all alternatives, including Alternative VI, are unacceptable to the City of Millbrae as proposed.

**Response.** Please refer to Response 2.7 for a discussion of BART/SamTrans' selection of the LPA. As noted in Responses 16.35 and 16.101, BART is proposing to revise the conceptual plan for the Millbrae Avenue Station to incorporate many of the City's proposed modifications.

16.113. Identify and propose mitigations for the impact on sensitive receptors of single noise events at the tunnel portal north of Millbrae Avenue station platform. Identify and propose mitigations for the impact of noise and vibration to houses on Aviator and Hemlock--both during construction and ongoing [due to] vibration from tunnel and cut-and-cover segments of the BART system.

**Response.** Airborne noise impacts from single noise events due to BART operations from the tunnel portal south to the tailtracks would be mitigated by at-grade sound walls. The height of such walls typically varies from 6 to 9 feet high depending on the location of the sound wall with

respect to the BART tracks. Please refer to page 3.9-84 of the DEIR/Technical Appendix for additional information.

Except for the proposed crossover trackwork inside the tunnel just north of the portal, BART operational impacts from groundborne noise and vibration in the vicinity of Aviator Avenue and Hemlock Avenue can be mitigated with measures applied inside the BART tunnel. Based on engineering studies to be performed during preliminary design, it may be determined that groundborne noise and vibration from the crossover can be fully mitigated by in-tunnel measures. If this is not possible, BART will consider locating the crossover away from residences in this area or to a point where impacts can be mitigated. The DEIR/SDEIS identifies mitigation measures to be implemented for noise and vibration (see pages 3.9-84 and 3.9-85 of the DEIR/Technical Appendix). Construction noise and vibration limits which are an integral part of BART's system design criteria are indicated in the DEIR/Technical Appendix on pages 3.13-158 and -159.

- 16.114. Identify and propose mitigations for the impact of removal of tunnel bore spoils--estimate up to 750K cubic yards will be pulled out on the Millbrae side--will it be removed by truck or rail--if truck, what route, what impact to streets? Are tunnel bore spoils contaminated? If so, then what will be the removal and handling process?

**Response.** Truck routes for tunnel spoil removal from a contractor's yard area south of the Cupid Row Canal and east of the CalTrain tracks would be across the existing dirt road north and westerly of the route of the Cupid Row Canal and south and easterly of the Belle Air School. This road could be connected directly to either the collector/distributor road from the San Bruno/U.S. 101 interchange; or the southbound on-ramp from San Bruno Avenue leading onto U.S. 101; or through San Bruno via First Avenue. The selected route must be negotiated and approved by Caltrans and the City of San Bruno. Truck routes for tunnel spoil removal from a contractor's yard set up in the Millbrae Station would be directly from Millbrae Avenue to U.S. 101. Tunnel spoils are not expected to be contaminated from surface-generated hazardous materials spills. The tunnel route lies in and below a layer of young bay mud which is impervious to liquid hazardous material flows. However, the contractor would be required to monitor all tunnel spoil as it is being removed from the tunnel boring machine for the presence of hazardous materials contamination. If any such material is detected, it would be separated from the uncontaminated material and disposed of in the manner prescribed by current state laws and codes.

There is no evidence that public streets will be impacted during construction beyond what is already discussed in the DEIR/Technical Appendix.

- 16.115. Identify noise and vibration impact[s] and propose mitigation to homes on north side of Santa Paula, both during construction and ongoing. What will these homeowners feel...a train go[ing] through the tunnel?

**Response:** During construction of the subway tunnel, residents on Santa Paula would be aware of the tunnel boring machine as it excavates underground. The sensation experienced would be an intermittent vibration of the building as the boring machine pushes forward to dig the tunnel. After construction of the subway tunnel, the groundborne noise and vibration from BART trains running in the tunnel below the residences would be mitigated to an insignificant level. Mitigation of the BART subway train noise and vibration would be accomplished through engineered vibration isolation measures applied inside the tunnel (e.g., floating slab tracked or resilient ties) or by offsite mitigation. The specific form of mitigation will be determined during the engineering phase of the project pending further field investigations concerning local soil characteristics.

- 16.116. Millbrae may experience a shortfall in funding to complete the grade separation structure at Millbrae Avenue. BART in Alignment VI can't be built without the grade separation structure. Will [the] BART project assist to complete the structure if necessary?

**Response.** The Millbrae grade separation is a discrete project, proposed, planned, and funded without BART's participation and prior to approval of the BART extension. The grade separation is necessary without the BART station. Therefore, BART will not participate in funding this project.

- 16.117. The impact of crime at a Millbrae Avenue station has not been suitably addressed--BART indicates that local cities will have to handle crime issues with local resources. Resources are not available for this purpose. Some suggested possible mitigations—a Millbrae Police Substation at the station area, contribution toward capital expenditure, joint patrol and operating agreements, the hiring of an additional Police Officer and an equipped Parking Enforcement Officer.

**Response.** BART proposes to improve its response times and security by increasing the staffing levels of BART police. Furthermore, BART will seek to design its station facilities in a manner that minimizes opportunities for crime to occur. Appropriate measures include provision of lighting, allowing for informal surveillance, and avoidance of dark, secluded areas. Other measures such as those identified by the commentor will not be pursued by BART. Please refer to Responses 14.57 and 16.2 for a discussion of BART policing.

- 16.118. The design of the existing rail station at Millbrae Avenue should be considered in developing the architectural theme of the Station Plan.

**Response.** The disposition of the existing railroad station requires coordination with all responsible agencies including Caltrans, the Joint Powers Board, the City of Millbrae and the State Historic Preservation Office. The degree to which the historic station architecture will influence the design of the new station facilities will be the subject of discussions among the key players during the course of preliminary engineering. The architectural theme will be developed in consultation with City of Millbrae.

- 16.119. BART seismic standards for structures exceed seismic design of the Millbrae Avenue grade separation structure--what modifications will BART propose [to] retrofit if necessary?

**Response.** The Millbrae Avenue grade separation was designed in accordance with Caltrans bridge design specifications, which require sufficient ductility to withstand seismic loading without loss of structural capacity. In other words, some damage might occur during an earthquake, but the structure would not collapse. For this reason, retrofitting is not considered necessary.

- 16.120. The proposed tunnel portal in Alternative VI is within 200 feet of the Serra Convalescent Facility. BART does not address both ongoing and construction impacts to [the] nursing home with respect to noise and vibration. [The] nursing home is a sensitive receptor and must be relocated by BART.

**Response.** Please refer to Response 16.109 for a discussion of the noise impacts to the Serra Convalescence Facility.

- 16.121. What is the ongoing impact of the tunnel vent fan located at tennis court locations?

**Response.** The “emergency ventilation building” would have a fan that is used only in the rare case of an emergency in the tunnel. Testing of the fan would occur on a regular basis, usually in the middle of the night when no one would be at the tennis courts. Appropriate noise mitigation would be implemented in the ventilation building if an impact to neighborhood residents is identified. The emergency ventilation fan is considered an “ancillary facility” and would be designed to the noise criterion contained in BART’s system design criteria. Please refer to the DEIR/Technical Appendix page 3.9-14 for additional details.

- 16.122. What is the breakdown of intermodal shifts at Millbrae Avenue Station? How was this shift developed and what is the margin for error? Currently, the DEIR assumes a very high capture of CalTrain trips onto BART. If this estimate is wrong, then the proposal for parking spaces at the station may be under estimated.

**Response.** The Millbrae Avenue Station is the only BART-CalTrain transfer station under Alternative VI, and the volume of these transfers presented in Table 3.1-65, Alternative VI, BART/CalTrain/ALRS Transfers, of the DEIR/Technical Appendix applies only to the Millbrae Avenue Station. Access to the Millbrae Avenue Station by other modes is contained in Appendix Table B-40 of the DEIR/Technical Appendix (Table B-40 of the DEIR/Technical Appendix has been revised and is provided following Response 10.12). It is believed the MTC mode choice model provided accurate results in forecasting the volume of transfers between other transit systems and BART and the number of vehicles accessing BART stations along the BART extension.

- 16.123. What will be the disposition of existing CalTrain parking at [the] current CalTrain Station?

**Response.** Existing CalTrain parking lots will be retained. Please refer to Response 16.41 for additional information on CalTrain parking.

- 16.124. Cumulative impacts of concurrent construction of BART, the Millbrae Avenue Overpass and the Airport Extension in Alternative VI must be considered and mitigated.

**Response.** That portion of the BART project extending from the right-of-way west of Highway 101 into the new International Terminal in the SFIA will be constructed by SFIA contractors. This work will be coordinated by the SFIA to minimize the impact of BART construction and the SFIA inbound/outbound ramps to Highway 101. The Millbrae overpass construction will be completed prior to the start of the BART construction.

- 16.125. How will BART/SamTrans manage non-commute parking at Millbrae Avenue garages? Many people will want to park at Millbrae Avenue, go to [the] airport to catch a plane and skip the high airport cost. BART must propose a workable parking management scheme.

**Response.** Please refer to Response 10.10 for a discussion of air passengers parking at certain BART stations and BART's strategy for prevention.

BART Board Resolution 1580 defines BART's mid-day reserved parking policy. This policy would be implemented at all new stations on the extension and establishes a parking restriction in the kiss and ride areas of stations to automobiles during the 7:00 A.M. to 10:00 A.M. and the 4:00 P.M. to 7:00 P.M. time periods. All BART stations are required to have some close-in mid-day reserved parking. The District's total mid-day parking capacity is about 10 percent systemwide.

- 16.126. SAMTRANS has not identified the origin, route and number of busses to service the station, and the impacts of this bus service system have not been addressed.

**Response.** The changes in SamTrans bus routes assumed in modeling the transit patronage forecasts were included in the Final Definitions of Alternatives, Task 5, Deliverable 7 published in August 1991 by MTC. This report was part of the AA/DEIR/DEIS and includes maps of the changes in SamTrans bus routes assumed for estimating transit patronage. Although this report was prepared for the AA/DEIR/DEIS, the same assumptions apply to the alternatives in the DEIR/SDEIS except that the bus routes serving the Airport Intermodal Station would be shifted south to serve the Millbrae Intermodal Station under Alternatives IV and V or to service the Millbrae Avenue Station under Alternative VI. A copy of the Final Definition of Alternatives,

All SamTrans bus routes that serve the Millbrae CalTrain Station would continue to serve the new CalTrain Millbrae Station as well as the Millbrae Avenue BART Station with the same or increased frequency of service. Any changes to SamTrans routes must first be proposed and then discussed in public hearings held by SamTrans before such changes are implemented.

While changes to individual bus routes were not specifically presented in the DEIR/SDEIS, Table 3.1-62 Alternative VI Transit Operator Service Characteristics, in the DEIR/Technical Appendix indicates the total changes to the SamTrans bus system under Alternative VI. Similar tables present these service characteristics for the other alternatives studies in the DEIR/SDEIS. A total of three new buses would be needed in Alternative VI. This results from a combination of reductions in some mainline service, and increases in BART station feeder service.

- 16.127. BART will relocate all residents of Garden Lane to a dispersed area. There are not enough units in Millbrae, and environs, to fill the dislocation. How will BART assist in replacing these lost housing units? In addition to the funding of the acquisition and relocation, BART must assist with the replacement of lost housing units through the funding of a local trust for affordable housing.

**Response.** Please refer to Response 16.16 for a discussion of relocation and available replacement housing.

- 16.128. The proposal to connect the BART parking structure to Millbrae Avenue grade separation structure with right in right out access is not feasible...[and] not included in [the] current structure design. This configuration would have serious impacts on traffic on Millbrae Avenue, if it were even feasible from an engineering standpoint. It is not compatible with the Millbrae Concept Plan.

**Response.** Access to the station parking structure will be evaluated in the final engineering design process. The Millbrae Concept Plan is a conceptual idea for the station area, not an adopted plan. BART is working with the City to attempt to address remaining design concerns.

- 16.129. Air quality deterioration caused by idling cars trying to get out of Rollins Road in the P.M. [hour] peak in the BART station proposal is not addressed.

**Response.** Air quality impacts at the intersection of Rollins Road and Millbrae Avenue attributable to idling vehicles exiting the Millbrae BART Station in the P.M. peak traffic hour are addressed in the DEIR/Technical Appendix on pages 3.10-28, 3.10-29, 3.10-30, 3.10-35, 3.10-36, 3.10-69, and 3.10-70.

Air quality impacts at the intersection of Rollins Road and Millbrae Avenue were analyzed under the No Build Alternative, TSM Alternative, and Alternative VI in the 1993, 1998, 2000, and 2010 analysis years and during A.M. and P.M. peak traffic hours. Traffic volumes (including turning movements) at each intersection approach were calculated by a sub-area traffic model developed to assign Metropolitan Transportation Commission (MTC) regional traffic forecasts to the local transportation network; this methodology is discussed on page 3.1-101 of the DEIR/Technical Appendix. Determination of vehicle queue lengths at each intersection approach was based on traffic volumes and signal phasing; this methodology is described in intricate detail in Section 5.5.6 of the Air Quality Technical Report. Microscale carbon monoxide (CO) analysis of the intersection was performed with the California Line Source Dispersion Model (CALINE6). A unique feature of this model is the use of modal emission factors; these modal factors account for the variation in vehicle emissions during the cruise, deceleration, idle, and acceleration modes of vehicle operation at the intersection. The highest predicted CO concentrations at the intersection therefore include the contribution from vehicles idling at Rollins Road. The predicted CO concentrations are less than the federal and state ambient air quality standards, and therefore do not constitute a significant air quality impact.

16.130. Who will fight a fire or provide rescue services inside the airport tunnel? If the City of Millbrae is expected to play a part in this service, then equipment and training must be provided.

**Response.** As noted on pages 3.5-8 and 3.5-9 of the DEIR/Technical Appendix under the BART Emergency Procedures Policy Vital Fire Protection Equipment, Communications and Training Agreement, BART furnishes equipment required for use in BART emergencies. The agreement further stipulates that local fire departments will respond to BART emergencies.

16.131. Millbrae must have full ability to review and comment on [the] grade separation structure at Hillcrest Avenue.

**Response.** The City of Millbrae will have the opportunity to review and comment on the grade separation structure at Hillcrest Avenue.

16.132. What is the disposition of the drainage canal at Corp Yard site? Is the structure under the current CalTrain right-of-way sufficient to handle BART also?

**Response.** The existing drainage structures under and upstream of CalTrain tracks, as well as the canal easterly of the proposed BART tracks, will remain unchanged. The drainage structures under the at-grade BART tracks will be sized to meet BART design criteria (100-year storm capacity). Thus, BART construction and operation will not exacerbate flooding in this location.

16.133. BART has not proposed local traffic signalization and management on surrounding surface streets to address the impact of the station.

**Response.** The DEIR/SDEIS includes analysis of local intersections in the vicinity of the Millbrae Avenue Station including the intersections of Rollins/Millbrae, El Camino Real/Millbrae, El Camino Real/Hillcrest, El Camino Real/Murchison, California/Murchison, and El Camino Real/Trousdale. The Rollins/Millbrae intersection would be modified with the Millbrae Avenue Station to accommodate the change in traffic with a BART station. The BART extension FRDEIR/S#2DEIS included these intersections and added the intersection of Adrian/Rollins, at which BART is proposing to fund installation of a traffic signal. Please refer to Response 6.6 for a discussion of impacts and mitigation for the intersection of El Camino Real/Millbrae. In addition, traffic volumes on many local streets were examined between I-280 and El Camino Real and no significant traffic impacts were found. Please refer to Response 16.18 for a discussion on the traffic impacts to specific local residential streets in the City of Millbrae under Alternative VI.

16.134. BART has proposed no open space, station plaza or station amenities.

**Response.** The station plans in the DEIR/Technical Appendix are schematic and intended to indicate the general location of station features. The Millbrae Avenue station plan on page 137, Figure 11 of the Design Appendix shows an entrance plaza at both the east and west at-grade access points to the station. Subsequent preliminary engineering and final design documents will be developed with input from the City of Millbrae.

16.135. BART does not address the issues of public and bicycle access through the station and across the rail right-of-way from east to west. Public access without the requirement of ticket purchase should be established across the right-of-way.

**Response.** Please refer to Response 16.96 for a discussion of access through the Millbrae Avenue Station for pedestrians and bicyclists.

16.136. The Millbrae Avenue Station must be configured to use recycled water for all non-potable uses.

**Response.** Recycled water will be used wherever practical for non-potable uses such as irrigation of landscaping if provided.

- 16.137. If the number of trips which shift to BART from CalTrain at Millbrae Avenue is as high as expected, what will CalTrain do with the empty trains? Will it be necessary to construct a switch track or other facility to move, store or redirect CalTrain rolling stock?

**Response.** BART assumes that CalTrain service will terminate at Fourth and Townsend Streets for all northbound trains to serve the passenger demand for southbound travel. A switch track or turn back in the vicinity of the Millbrae Avenue Station was not analyzed, although such facilities are present in the South San Francisco train yards.

The ridership on CalTrain would be significantly reduced north of Millbrae Avenue because of the transfers to and from BART. For example, according to the MTC travel demand model, approximately 3,500 CalTrain riders would travel northbound on CalTrain at the Millbrae Avenue Station during the A.M. peak hour. After the Millbrae Avenue Station, the number of CalTrain riders would decrease to about 750. The MTC model assumed that riders would always take the fastest transit path to their destination, and the CalTrain to BART transfer for trips to the San Francisco Financial District is the fastest transit path.

- 16.138. The City of Millbrae concurs with the Millbrae School District comment that revenues lost to the District must be replaced by BART as a mitigation for the taking of Garden Lane in Alternative VI.

**Response.** As described in the last paragraph on page 3.2-47 of the DEIR/Technical Appendix, BART/SamTrans would address demonstrable loss of income to Millbrae School District in accordance with state and federal relocation laws as applicable to non-profit organizations and public agencies.

## 17. CITY OF SAN BRUNO

- 17.1. The City of San Bruno declares and resolves that the only "Build Alternative" acceptable to San Bruno is Alternative VI with a BART Station integrated into the Tanforan Park Shopping Center on an alignment through San Bruno which has a bored tunnel or other engineered subway south of Euclid Avenue which will not disturb surface of streets or result in costs to our City.

**Response.** Residential neighborhoods adjacent to the Millbrae Intermodal Station under Alternatives IV and V would be significantly affected by BART-related traffic and activities. These changes to the neighborhood are identified in Section 3.2.5, Neighborhood Impact Assessment and Mitigation, of the DEIR/Technical Appendix. While mitigation measures are suggested, the DEIR/Technical Appendix indicates that they would not be sufficient to reduce the impacts to an insignificant level. A bored tunnel through downtown San Bruno was determined to be infeasible for a number of reasons, as described in Response 17.68.

The commentator's support of Alternative VI is noted. Public opinion was considered by the BART and SamTrans Boards during the LPA selection process in November 1995. Please refer to Response 2.7 for a discussion of the selection of the Alternative VI Aerial Design Option as the new LPA.

- 17.2. The BART station shall be identified as the "Tanforan/San Bruno" station.

**Response.** BART acknowledges this request and will refer to the Tanforan Station as the Tanforan/San Bruno Station during the preliminary engineering phase of the project.

- 17.3. The land use concepts for the Tanforan/San Bruno BART Station shall consist of the following:

- The BART station and its associated parking garage and drop-off area;
- A relocated and unified SamTrans bus facility; and
- A City of San Bruno Police Facility...
- The general architectural design of the BART station, associated facilities, and general environs shall emphasize the former use of the site as a racetrack...
- A landscape plan shall be prepared as part of the BART project.

**Response.** BART is proposing to modify the Tanforan Station under Alternative VI and the Aerial Design Option LPA to incorporate many features of the Tanforan/BART Concept Plan jointly submitted by the Hapsmith Company and the City of San Bruno. These topics are addressed under Responses 17.4 through 17.9, which expand upon the five topics introduced in Comment 17.3.

17.4. The BART project shall realign existing Huntington Avenue by reconstructing the roadway to the east immediately adjacent to Huntington Avenue East, while BART tracks shall be constructed in a subway immediately adjacent to the Tanforan Park Shopping Center...

**Response.** The features of the Tanforan/BART Concept Plan to be incorporated as part of the BART project include the realignment and reconstruction of Huntington Avenue and subway construction immediately adjacent to the Tanforan Park Shopping Center as well as several other features.

The design of Tanforan Station will be the result of direct and significant involvement by community and agency representatives during preliminary engineering and final design. Specific architectural and landscape expression and details will be developed as the design progresses. A landscape plan will be prepared for the station area by BART as part of this process.

During deliberations of the merits of the Tanforan Station modifications no new significant impacts were identified. In fact, impacts in certain issue areas would be minimized compared to the original station design. A brief analysis for each environmental issue follows:

**Transportation.** The intersection of Huntington Avenue and the BART station entrance would improve with the modification because the driveway would be located at the station rather than north of it.

**Land Use.** Underground easements will be obtained in San Bruno where the alignment verges away from the SPTCo right-of-way. However, since no displacement would occur there would be no significant impact.

**Visual Quality.** Under the modification, the station would be built in a subway across the street from the realigned Huntington Avenue, further from the Fifth Addition neighborhood, thus eliminating the visual encroachment impact identified under the original station plan. Scale incompatibilities would be minimized by swapping the station location and Huntington Avenue. The proposed widening of Huntington Avenue would include landscaping that would serve as a visual buffer between the Fifth Addition neighborhood and the BART alignment and station.

**Cultural Resources.** No new land use would be disrupted as a result of the station modifications.

**Community Services.** Widening Huntington Avenue may improve emergency access to the Tanforan Shopping Center and the BART station.

**Geology.** No new sub-surface structures would be created. The right-of-way would already be disturbed by BART and any loose, unconsolidated soils would be replaced by compacted soils for construction of BART.

**Biology.** No increase in wetlands or endangered species disruption would occur as a result of the station modifications.

**Hydrology.** Flood control capacity and drainage would not be affected by station improvements.

**Noise and Vibration.** No new noise or vibration would occur as a result of station improvements.

**Air Quality.** No new emissions would be generated.

**Public Health.** The existence of potentially hazardous materials would be identified and removed prior to construction of the BART alignment so that implementation of station improvements would not increase the risk of exposure to hazardous materials.

**Energy.** Energy demands would be the same as identified in the DEIR/Technical Appendix under Alternative VI.

**Construction.** Construction impacts would be the same as identified in the DEIR/Technical Appendix under Alternative VI. Widening Huntington Avenue to four lanes would have a similar visual quality impact to the residents of the Fifth Addition neighborhood as construction of the station platform under Alternative VI.

- 17.5. The proposed Tanforan/BART Concept Plan states that the proposed BART parking garage shall accommodate approximately 1000 to 1200 parking spaces...A “Parking Management Program” must be established between BART, SamTrans, Tanforan Park Shopping Center, and the City of San Bruno....The SamTrans bus facility shall accommodate approximately eight (8) to ten (10) bus bays...The BART parking garage shall have two (2) major access points: one from a signalized intersection of Huntington Avenue and Sneath Lane, which is [an] integral part of the BART project, and one from a signalized intersection of Huntington Avenue and the combined vehicle/SamTrans bus access, which is also an integral part of the BART project.

**Response.** The Tanforan Station has been revised based on examination of the proposed Tanforan/BART Concept Plan submitted by the City of San Bruno. See the revisions to the Tanforan Station in Volume IV Design Appendix. Revisions to the Tanforan Station plan will mitigate the significant traffic impacts to the intersection of Huntington Avenue and Tanforan Driveway North under the Alternative VI LPA and the Aerial Design Option LPA. Environmental impacts of the revised Tanforan Plan were examined and no significant impacts were found.

The revised Tanforan Plan includes a separate parking garage to the east of the existing Sears Tire, Battery, and Auto Center. Approximately 1,000 parking spaces would be provided for BART patrons in a five level structure, which includes one ground level with four elevated levels. Two entrances will be provided to and from Huntington Avenue including a signalized intersection with Sneath Lane. The second intersection to the east of the Huntington/Sneath intersection will be a right in/right out only intersection. A signalized intersection will be provided on Huntington Avenue for the eight bus bays located to east of the BART garage and north of the BART station. Kiss-and-ride parking will be provided adjacent to the station, separated from Huntington Avenue by a median strip. A third traffic signal is to be installed at the northern entrance/exit to the Tanforan Park Shopping Center which is just south of the kiss-and-ride facility. A BART police station will be located adjacent to the BART garage on the south side. Please refer to Figure 3, page 35 of the Design Appendix (Volume IV of this FEIR/FEIS) for an illustration of the revised Tanforan Station plan.

17.6. According to the Tanforan/BART Concept Plan, traffic access and circulation for the BART project shall consist of the following:

- The BART project shall pay for its proportionate share of the intersection improvements required at the intersection of Sneath Lane and El Camino Real as a mitigation of the impact on the intersection.
- The BART project shall pay for its proportionate share of the signalization required at the intersection of Sneath Lane and the entrance to Sears and Burger King as a mitigation of the impact on the intersection currently controlled only by stop signs.
- The BART project shall pay for the signalization and intersection improvements on El Camino Real at the driveway entrance to the Tanforan Park Shopping Center which are necessary to provide left-turns into and out of the center as a mitigation for the increased congestion and deterioration of the Level of Service (LOS) at El Camino Real and Sneath Lane and at Huntington Avenue and BART parking entrance.
- The BART project shall pay for the signalization of the intersection of Huntington Avenue and one of the entrances to the shopping centers parking garage area as a mitigation of the increased traffic flow and afternoon congestion along Huntington Avenue created by BART/SamTrans traffic and to compensate the shopping center for its loss of two vehicular access points on Huntington Avenue.

**Response.** BART will pay for its proportionate share of intersection improvements at the intersections of El Camino Real/Sneath, Sneath/Huntington and a BART station entrance/exit with Huntington with the Tanforan Station. These improvements would not be required with the I-380 San Bruno Station or the Downtown San Bruno Station. The sponsors of the BART project do not agree that payment for improvements at the intersection of the driveway entrance to the Tanforan Park Shopping Center and El Camino Real are required as mitigation to significant traffic impacts under a BART build alternative, given the proposed improvements at the intersection of El Camino Real/Sneath. Under Alternative VI and the Aerial Design Option LPA, the revised Tanforan Station includes a separate garage for BART patrons immediately east of the Sears Tire, Auto and Battery Center. The entrance/exit to this garage at the intersection of Huntington Avenue and Sneath Lane would be signalized. In addition, the revised plan for the Tanforan Station includes a signalized intersection on Huntington at the entrance to the bus bays located to the north of the BART station plus another traffic signal on Huntington at the north entrance/exit of the Tanforan Park Shopping Center Garage located to the south of the kiss-and-ride exit.

Traffic analysis of the intersection of Sneath Lane and the Sears/Burger King entrance indicates that it would operate at unacceptable levels of service in 2010 under the Alternative VI LPA and the Aerial Design Option LPA with the current four-way stop sign. This intersection would be improved to include a traffic signal with the BART-San Francisco Airport Extension paying for its proportionate share of this signalization.

17.7. Under the City of San Bruno's proposed Tanforan/BART Concept Plan, the BART project shall pay for the cost of reconstruction of Huntington Avenue from the intersection of Sneath Lane south to and including Herman/Forest Lane, with the newly constructed Huntington Avenue designed to City standards at the time of reconstruction, incorporating the following:

- Two through lanes in each direction;
- A center landscaped median with left-turn or U-turn lanes as deemed appropriate;
- Dedicated bike lanes to connect to the BART station area;
- A pedestrian sidewalk and landscaping along the west side and landscaping along the east side (adjacent to Huntington Avenue East);
- Striped and signaled pedestrian crossing from Huntington Avenue East (the Fifth Addition Residential Area) at each of the two signalized intersections along Huntington Avenue; and

- All utilities to be underground as part of the BART project.

**Response.** Please refer to Response 17.6 regarding incorporation of intersection improvements of the Tanforan/BART Concept Plan. BART will incorporate each of the components described with the exception of relocating utilities underground and the bicycle path as part of the project. Please refer to Response 146.1 for a discussion of the bicycle path. During evaluation of this design refinement, no new significant impacts were identified.

17.8.

For purposes of the BART project, the Fifth Addition area shall remain intact, with no additional vehicular access points proposed at this time, and with two controlled pedestrian access points across the new Huntington Avenue as detailed above.

**Response.** With incorporation of the Tanforan/BART Concept Plan, presented by the City of San Bruno, the Fifth Addition area shall remain intact, with no additional vehicular access points proposed, and with two controlled pedestrian access points across the new Huntington Avenue.

17.9.

The City of San Bruno requests that following the selection of a revised LPA, that BART/SamTrans request the FTA to allow \$200,000 from the PE grant to be funded to the local cities and county to assist in their site specific planning activities surrounding the BART stations.

**Response.** Consistent with the FTA Livable Communities Initiative, BART has requested an allowance of \$200,000 from FTA for all cities to provide input to BART on design-related elements of the BART stations. Each city may be allocated up to \$50,000 for site-specific station area planning.

17.10.

The comparison indicates that conditions reported in the BART DEIR/SDEIS for existing and future scenarios are almost uniformly better than conditions reported in the SFIA EIR. Specifically, these include U.S. 101 freeway segments north of SFIA, and intersections of San Bruno Avenue at San Mateo Avenue and San Bruno Avenue at El Camino Real. The disparity in future conditions along San Bruno Avenue may be because the SFIA study included traffic generated by other development projects.

**Response.** The reason for the disparity in future freeway traffic volumes as reported in the two documents is that the analyses conducted for the two documents relied on different methodologies. The methodology used in the DEIR/SDEIS to analyze the level of service at local intersections is the same as the methodology used and approved by the San Mateo County Transportation Authority in their Congestion Management Plan. Please refer to Responses 10.3 and 10.4 for additional discussion on the accuracy of traffic projections performed for the DEIR/SDEIS.

17.11.

The DEIR/SDEIS traffic analysis does not, but should, accurately reflect local conditions. However, that does not explain the discrepancies in reported freeway conditions, which vary considerably. BART should explain why its analysis shows BART improving freeway conditions north of SFIA, while the SFIA EIR concluded that a BART extension could not significantly improve freeway conditions.

**Response.** Please refer to Response 10.4 for a discussion of conditions on Highway 101 as reported in the SFIA Master Plan EIR, compared to conditions described in the BART–San Francisco Airport Extension DEIR/SDEIS.

17.12.

Using data contained in the Appendix Table B-40, DEIR on ridership, mode split, station auto access, and auto occupancy, Tanforan Station would generate 268 A.M. and 268 P.M. peak hour vehicle trips. BART staff acknowledged that data contained in Table B-40 was inaccurate and provided the City with corrected data. The revised data would generate 435 A.M. peak and 435 P.M. peak trips, and must be incorporated into the DEIR/SDEIS.

**Response.** Table B-40, Alternative VI, BART Station Entries and Exits, Daily Volumes by Access Mode and Trip Purpose in Appendix B of the DEIR/Technical Appendix contained typographical errors under the auto access category. These incorrect numbers were not used in the analysis of traffic impacts that relied on output for the subarea model. However, Table B-40 information was used to construct several other summary tables that incorrectly reported the information on auto access under Alternative VI. Table B-40 has been revised, as shown in Response 10.12. Revised Tables 3.1 through 3.69, BART Station Daily Volumes, are provided in the FEIR/FEIS.

- 17.13. By comparison, the intersection analysis calculation sheets show that Tanforan Station would generate 835 A.M. and 1,046 P.M. peak hour vehicle trips. Thus, even with the correct data in Table B-40, there is a very large discrepancy between trips that appear in the Appendix A LOS calculations, and the calculated vehicle trips generation. BART must address this inconsistency to determine the appropriate station trip generation.

**Response.** The intersection turning movements at the BART station entrances/exits differ from the Appendix B tables on BART station entries and exits by access mode in three respects. The first is that kiss-and-ride trips in the turning movement volumes count as two vehicle trips, one into the station and another out of the station, while in the tables from Appendix B they count as one auto access trip. The second difference is that bus vehicle trips are not designated in the tables in Appendix B, whereas single bus trips are again treated as two trips (into and out of the station) in the turning movement volumes. In addition, each bus vehicle is equivalent to two automobiles in the calculation of intersection level of service to account for the size and slower acceleration time for buses. The third difference is due to the fact that the Tanforan Station parking garage is a combined shopping center/BART parking facility under Alternative VI. The vehicle trips not related to BART are included in the vehicle volumes shown as entering or exiting the BART station garage as calculated in the level of service analyses.

- 17.14. A review of the Appendix A LOS calculation sheets identified some inaccurate characterizations of intersections, including lane configurations and traffic signal phasing. These include the El Camino Real/San Bruno Avenue, San Bruno/Huntington, and Sneath Lane/I-280 intersections....BART must check and ensure the accuracy of data describing each intersection for the capacity utilization and other similar calculations.

**Response.** Please refer to Response 10.8 for a discussion of lane configurations and signal phasing at these three intersections.

- 17.15. Traffic volume on some intersection approaches near Tanforan Station is higher under the No Build scenario than for Alternative VI in the Year 2010. This is counter intuitive. Reductions in traffic volume could be expected on freeways and some regional roadways, but not on local streets...near the station site [i.e.] El Camino Real/Sneath Lane, El Camino Real/San Bruno Avenue, Huntington Avenue/Sneath Lane, [and] Huntington Avenue/San Bruno Avenue.

**Response.** The addition of the BART station at the Tanforan Shopping Center would result in redistribution of traffic in the vicinity of the station. The redistribution is created by three factors: 1) the BART-San Francisco Airport Extension removes traffic from the corridor as a whole; 2) BART-related traffic tends to congregate near the BART stations; and 3) non-BART-related traffic compensates and makes adjustments in their travel patterns. Non-BART-related traffic redistribution includes some motorists taking advantage of reduced freeway traffic volumes due to BART creating a ripple-down reduction of traffic on the arterials, and also due to some motorists avoiding intersections with increased traffic volumes near the BART station.

The reduction in traffic on the north leg of the El Camino Real and Sneath Lane intersection is due to both redistribution effects. During the A.M. peak hour, as expected, the other three legs of the intersection have increased traffic volumes due to the proximity of the Tanforan BART Station under the 1992 LPA, Alternatives III and IV as well as the Alternative VI LPA, and the Aerial Design Option LPA. This traffic increase masks the corridor-wide reduction in traffic along El

Camino Real due to the BART-San Francisco Airport Extension, but not for the north leg of the intersection at Sneath Lane because motorists accessing the Tanforan Station come primarily from the south and the west. The corridor-wide reductions in traffic due to the BART extension decrease traffic along El Camino Real more during the P.M. peak hour than the A.M. peak hour. Since traffic volumes are generally greater during the P.M. peak hour than the A.M. peak hour, the traffic crowds the roadway network more; thus, the impact of the corridor-wide traffic diversion with the BART-San Francisco Airport Extension to the freeways and away from the arterials is more pronounced during the P.M. peak hour.

Please refer to Response 17.17 for a discussion of two non-redistribution traffic changes that effect San Bruno Avenue.

17.16. Traffic volume between adjacent intersections near Tanforan Station do not "balance" at all segments, i.e. departure volumes from one intersection are not comparable to the approach volumes at the adjacent intersection. In some cases, mid-block land uses could explain part [of] the discrepancy, but would not explain the order of magnitude of the differences found. The following are examples of balancing inconsistencies:

- Eastbound on Sneath Lane between El Camino Real and Huntington Avenue;...
- Southbound El Camino Real between Sneath Lane and the I-380 WB Off-ramp;...
- Northbound I-280 ramp road between San Bruno Avenue and Sneath Lane;...
- Northbound El Camino Real between the I-380 Eastbound and Westbound Off-ramps;...
- Huntington Avenue between San Mateo Avenue and San Bruno Avenue;...
- San Mateo Avenue between San Bruno Avenue and Huntington Avenue...

**Response.** Please refer to Response 10.7 for a discussion of balancing the traffic volumes between these specific intersections.

17.17. Trip assignments at several intersections near Tanforan display confusing patterns....Movements at intersections [El Camino Real/Sneath Lane, El Camino Real/San Bruno Avenue, El Camino Real/I-380 Westbound Ramp, Sneath Lane/I-280 Northbound Ramp, San Bruno Avenue/I-280 Northbound Ramp, San Bruno Avenue/Huntington Avenue, San Bruno Avenue/San Mateo Avenue, San Mateo Avenue/Huntington Avenue] are counter-intuitive for traffic patterns near a transit station, because travel is shown moving away from the BART station, when the opposite pattern should occur.

**Response.** The counter-intuitive traffic movements that are less than about twenty vehicles are the result of redistribution of traffic due to the presence of the BART station. Please refer to Response 17.15 for further discussion of this redistribution. Two additional factors contributed to vehicle turning movements increasing under Alternative VI that are in opposite directions from that which would be associated with the BART-related traffic. The first factor is associated with people who are dropped off at the station by private vehicle or kiss-and-ride trips. In the A.M. peak hour, there will be vehicles traveling away from the station by those who dropped off a BART patron as well as the anticipated traffic movement toward the station. Approximately, one quarter of the vehicle trips toward the station are these kiss-and-ride vehicles that would also travel away from the station.

The second factor of these counter-intuitive movements is that some of the SFIA work trips were not in the MTC trip table under the No Build Alternative. These work trips are properly represented in all of the BART build alternatives; thus, the most conservative case conditions under the BART build alternatives are accurately described in the DEIR/SDEIS. The lower number of trips in the No Build Alternative for roads near SFIA resulted in overstating the relative impact of the BART build alternatives compared to the No Build Alternative. Thus, the environmental document makes the traffic impact of the BART build alternatives worse relative to the No Build condition than it actually would be. For example, in 2010 under the No Build Alternative, eastbound traffic on San Bruno Avenue, east of Third Avenue, should be increased by approximately 180 vehicles during the A.M. peak hour and increased by approximately 50 vehicles in the westbound direction at the same location during the P.M. peak hour. These results of these

missing trips under the No Build Alternative are these counter-intuitive traffic turning movements under the BART build alternatives, such as Alternative VI.

- 17.18. The frequency and order of magnitude of the inconsistencies detailed in Comment 17.17 are considerable causes for concern, and cast doubt on the validity of the traffic data because collectively, they may affect findings of significant impacts and required mitigation. Given these concerns, BART must revise the traffic impact analysis portion of the DEIR. San Bruno's engineering staff is willing to help BART review key traffic study and modeling assumptions and applications, and review model output.

**Response.** Please refer to Response 17.12 regarding the inconsistencies. The typographical errors made in Table B-40 were unfortunate, but the information reported did not affect the results of the analysis because Table B-40 simply reported information and was not used in performing analysis. Revised Table B-40 is provided following Response 10.12.

- 17.19. BART's trip distribution diagram (provided separately by BART staff) indicates that 15 to 20 percent of project traffic may access from the south via Huntington Avenue. Previous studies and anecdotal evidence suggest that Huntington Avenue acts as a key approach route to the malls from the south, and that this distribution may be underestimated.

**Response.** The traffic modeling depended upon ABAG's 1990 forecasts for socioeconomic information for the level of housing and employment for the neighborhoods in the study area. The results of the intersection turning movements for 1993 were compared against traffic counts taken within one or two years. The Belle Air and Lomita Park neighborhoods are the two residential neighborhoods to the south of the Huntington/San Bruno Avenue intersection in San Bruno that would access the Tanforan Station. The results of the subarea traffic model indicated that 15 to 20 percent of the station's access is along Huntington Avenue. Please also refer to Response 17.25 for a discussion of traffic along San Bruno Avenue that might also use Huntington Avenue to access the Tanforan Station.

- 17.20. The evaluation of project considerations (i.e., intersection LOS) at the "Triangle" formed by the intersections of San Bruno/Huntington, San Bruno/San Mateo, and Huntington/San Mateo are predicted on the implementation of the CalTrain grade separation project at San Bruno Avenue between San Mateo and Huntington. Consequently, the DEIR/SDEIS forecasts that 2010 conditions at these three intersections with the Alternative VI alignment are quite favorable....BART must re-evaluate conditions at these locations assuming that the existing lane geometry will remain in place.

**Response.** The assumptions concerning San Bruno Avenue and the CalTrain railroad tracks in the DEIR/SDEIS were that no grade separation on San Bruno exists. The level of service analysis at intersections in this immediate vicinity included time penalties in the calculations for the railroad gate crossing gates to be down, preventing traffic from crossing the tracks. This estimation included the increase in CalTrain service to 86 trains. The level of service estimation is based on the average for the peak hour and this does not mean that the level of service may be lower for short periods during that hour.

- 17.21. The DEIR/[Technical Appendix] projects that Huntington/San Mateo (page 3.1-105) would degrade from LOS C to LOS E in 1998 under Alternative VI. However, that finding is not reflected in Table 3.1-73 [on page 3.1-106], and no mitigation measure is recommended for the Alternative VI alignment.

**Response.** The LOS information in Table 3.1-73 (Intersection Level of Service, Significantly Impacted Intersection, Year 1993 No-Build and 1993 Build Alternatives) and Table 3.1-75 (Intersection Level of Service, Significantly Impacted Intersection, Year 1998 No-Build and 1998 Build Alternatives) in the DEIR/Technical Appendix contains the correct level of service at the Huntington/San Mateo intersection, including under Alternative VI. However, the statement

referred to in the comment (page 3.1-105, second paragraph of the DEIR/Technical Appendix, in the third sentence under the bulleted heading "San Mateo/Huntington" in reference to traffic impacts in 1993) is not correct and has been deleted. The same statement is repeated on page 3.1-111 in the bulleted paragraph "San Mateo/Huntington" and is also deleted (see below). These statements concerning impacts to the San Mateo/Huntington intersection under Alternative VI were contained in earlier drafts of this environmental document when a different Tanforan Station design concept was being reviewed. After incorporating the traffic impacts of the Tanforan Station, these two statements were inadvertently left in the text of the document.

Page 3.1-105, bulleted paragraph "San Mateo/Huntington" in the DEIR/Technical Appendix is revised as follows:

- **San Mateo/Huntington (60).** The unsignalized intersection at this location currently operates as LOS D in the A.M. and P.M. peak hours. Under Alternatives IV and V and Design Options V-A and V-B, LOS would deteriorate to E or F during the P.M. hour. ~~During the A.M. peak hour, LOS would degrade to E under Alternative VI.~~

Page 3.1-111, bulleted paragraph "San Mateo/Huntington, in the DEIR/Technical Appendix, is revised as follows:

- **San Mateo/Huntington (60).** This unsignalized intersection is forecast to operate as LOS C during the A.M. peak hour and at LOS D during the P.M. peak hour under the 1998 No Build scenario. During the P.M. peak hour, LOS would degrade to E under Alternatives IV and V and Design Options V-A and V-B. ~~During the A.M. peak hours, LOS would degrade to E under Alternative VI.~~

17.22. The traffic analysis must also assume that the railroad grade separation at Scott Avenue will not occur. In addition, there are no plans to connect a new roadway between Huntington and San Mateo with a potential connection to Shaw.

**Response.** Although San Mateo County has recommended a project for a railroad grade-separation at Scott Avenue, the assumption used in the traffic analysis performed for the DEIR/SDEIS was that Scott Avenue was at grade and crossing the railroad tracks would still be required. The new roadway between Huntington Avenue and San Mateo Avenue described in the comment was neither assumed nor included in the traffic analyses.

17.23. Given the increased level of traffic, and the likelihood that much of the roadway would be unearthed during construction, BART must re-construct the I-380 to San Bruno segment [of Huntington Ave.] as a four lane roadway with bike lanes, using the SPTCo right-of-way (or S.F. Water Department right-of-way) as needed. This would form a continuous four-lane roadway segment to the Station site.

**Response.** Widening of Huntington Avenue from Forest/Herman to south of Euclid Avenue will be required as part of construction mitigations. Huntington Avenue widening would extend west toward San Bruno Avenue and transition to a two-lane roadway before the intersection with San Bruno Avenue. The widening of Huntington Avenue will assist in the flow of construction-related traffic when it merges with non-construction-related traffic on this roadway. Queuing of traffic during construction along Huntington Avenue would be accommodated by a wider street alleviating traffic congestion in the area. The BART-San Francisco Airport Extension will require the contractor to provide adequate traffic control and flaggers to protect the public during construction hours and to maintain clean streets, free of construction debris.

The widening of Huntington Avenue would not include separate bike lanes. However, a proposed bike path along the BART alignment, which is in subway in this segment between San Bruno Avenue and the Tanforan Station, could provide some bicycle access to the Tanforan Station.

17.24. BART must re-analyze traffic and circulation along Huntington Avenue under the assumption that there would be no CalTrain grade-separation at San Bruno Avenue, San Mateo Avenue, Angus Avenue, or Scott Avenue. The proposed traffic signal at San Mateo Avenue/Huntington Avenue must be analyzed and required as a mitigation if warranted.

**Response.** No railroad grade-separation crossings were assumed in the DEIR/SDEIS at San Bruno, San Mateo, Angus or Scott Avenues. Therefore, re-analysis is not required.

17.25. BART must pay its proportionate share of improvements to San Bruno Avenue, based on the revised percentage of traffic using each segment, including its proportionate share of widening San Bruno Avenue between U.S. 101 and Huntington Avenue (BART's share could be minimal), and restriping or reconfiguring San Bruno Avenue within its current right-of-way between Huntington and El Camino, including accommodating longer left-turn bays at San Bruno and Huntington (BART's share is estimated to be 4 percent based on current DEIR/SDEIS data, but this percentage must be revised as required by the re-analysis stated herein).

**Response.** Traffic related to the BART extension was not found to have any significant impacts to traffic operations on San Bruno Avenue, either between Highway 101 and Huntington Avenue or between Huntington Avenue and El Camino Real under any of the BART build alternatives with a Tanforan Station. Re-analysis of traffic impacts to San Bruno Avenue is not warranted based on the comments received.

The BART build alternatives with the Tanforan Station would add traffic to San Bruno Avenue. However, the sub-area traffic model analysis indicated that none of the intersections along San Bruno Avenue would have significant traffic impacts with these BART build alternatives that include the Tanforan Station. An increase in the volume-to-capacity ratio of three to five percent for the intersections along San Bruno is not significant when they are operating at LOS A or B. The BART build alternatives that include the I-380 Station or the Downtown San Bruno Station rather than the Tanforan Station would significantly improve San Bruno Avenue.

17.26. Widening or reconfiguring San Bruno Avenue between Huntington Avenue and El Camino Real (within its current right-of-way, if possible) would allow a center left-turn lane. Lengthening the left-turn pocket for motorists turning northbound on Huntington from San Bruno Avenue would provide better and safer traffic flow. BART must pay its fair share of such improvements, based on the percentage of BART traffic along this section of San Bruno Avenue, [and] based on revised traffic data required herein.

**Response.** Please refer to Response 17.25 on impacts to San Bruno Avenue, which also applies to this comment. The heading to this comment noted the use of Euclid Avenue as a "short-cut." Few, if any, BART-related auto access trips would use Euclid Avenue. Euclid Avenue is a narrow, residential street whose configuration limits the passage to one car at a time when cars are parked on both sides of the street. Five streets cross Euclid, between El Camino Real and Huntington, and two of these streets have stop signs at their intersections with Euclid Avenue. BART-related traffic would not travel westbound on Euclid to El Camino Real because left turns onto El Camino Real are not permitted.

17.27. Reconstruction of Huntington Avenue to four lanes and left-turn pockets (and bikeways), as detailed above, would facilitate the flow of traffic through the Huntington/San Bruno Avenue intersection and reduce the propensity of motorists to use local residential streets to avoid congestion at this intersection. This would be a part of the BART project.

**Response.** Traffic related to the BART extension would not cause a significant impact to operations on Huntington Avenue between San Mateo Avenue and Forest/Herman Lane. Please refer to Response 17.23 for a discussion of improvements to Huntington Avenue between I-380 and San Bruno Avenue.

17.28. On Page 3.1-111 of the DEIR/Technical Appendix projects that [the] intersection of Huntington/San Mateo would degrade from LOS C to LOS E in 1998 under Alternative VI. However, Table 3.1-75 on page 3.1-110 of the [DEIR/]Technical Appendix indicates that the LOS of this intersection of Huntington/San Mateo would degrade from C to D. The higher traffic volume would increase the safety hazard potential. Installation of a traffic signal, identified by the DEIR as a BART mitigation, would reduce the impact to less-than-significant levels [and must be implemented].

**Response.** Response 17.21 also applies to this comment. The information in Table 3.1-75 of the DEIR/Technical Appendix is correct in that under Alternative VI no significant impact occurs at the intersection of Huntington and San Mateo Avenue while the statement on page 3.1-111, first bullet of the DEIR/Technical Appendix is incorrect and has been deleted, as shown in Response 17.21.

17.29. Continuation of Huntington Avenue as a four lane thoroughfare, with left turn pockets, between San Bruno Avenue and San Mateo Avenue would facilitate smoother and safer traffic flow in this area. Widening in this area would occur to the east in the open space area in the triangle and would not require the acquisition or relocation of any properties. BART must include this as part of the project.

**Response.** Changes to this segment of Huntington Avenue (i.e., between San Bruno and San Mateo Avenues) would occur if the I-380/San Bruno Station or the Downtown San Bruno Station were to be built as an option under Alternatives IV and V, or under Design Options V-A and V-B. The suggested widening of this segment of Huntington Avenue would not be necessary under the 1992 LPA, Alternatives III and VI or the Alternative VI Aerial Design Option because few vehicles would be added to this segment of Huntington Avenue as a result of the Tanforan BART Station. Please also refer to Responses 17.23 and 17.27 for further discussion of impacts to Huntington Avenue.

17.30. Widening of San Bruno Avenue, with center turn lanes, between Highway 101 and Huntington Avenue would improve left turning capacity at intersections along San Bruno Avenue, including Second Avenue/San Bruno and would reduce the propensity of motorists using the Belle Air residential neighborhood as short cuts during the mid-afternoon period. BART must pay its proportionate share of this widening, based on percentage of traffic of this section of San Bruno Avenue, as revised by re-analyzing data as required herein.

**Response.** Please refer to Response 17.25 for a discussion of San Bruno Avenue traffic impacts.

17.31. ...The ridership, traffic, and parking forecasts exclude potential BART demand from air passengers, even though the MTC model predicts that 1,700 San Mateo County residents would use the transit to SFIA in 2010 (Appendix Table B-37). This raises two issues: (1) is it an appropriate policy, and (2) is it a reasonable expectation? Whether the policy is appropriate is subjective and needs to be explored more thoroughly by BART, SFIA, and the County, and affected cities. Whether it is feasible with the proposed mitigation measures appears doubtful.

**Response.** Please refer to Response 10.10 for a discussion of FTA policy on air passenger parking at commuter rail stations and BART's plans to prevent air passenger parking.

17.32. Parking by same day air passengers would be addressed by Mitigation Measure 6.2, which includes fare surcharges for BART trips between the Extension stations and SFIA. This would affect all County residents wanting to take BART to SFIA, whether they park at a station or not, and therefore may be unacceptable. BART must develop a cooperative, feasible plan for limiting air passenger parking, not patronage, along the Extension. Until then, the traffic, ridership, and parking forecasts must assume that air passengers will use BART. The DEIR/SDEIS impact analysis must therefore be revised.

**Response.** Please refer to Response 10.10 for a discussion of the proposal to levy a surcharge on patrons with destinations at the SFIA.

- 17.33. Appendix Table B-40 must be revised to arrive at the calculated parking demand for 800 spaces. Using the existing ridership data shown, parking demand would be only 513 spaces.

**Response.** Table B-40 contains typographical errors for auto access. A revised Table B-40 is provided following Response 10.12.

- 17.34. Parking demand at Tanforan Station may be higher than estimated, depending on the level of congestion along U.S. 101 leading to the Millbrae Avenue Station. Severe congestion, similar to that reported in the SFIA EIR, could cause some commute traffic to divert from the U.S. 101 corridor to the I-280 corridor, which provides good access to Tanforan Station. Determining the potential for such diversion requires more in-depth analysis. BART should perform a sensitivity analysis to determine the extent to which ridership and parking demand at Tanforan Station may be affected by high congestion levels on U.S. 101, then develop a range of likely commuter parking demand for Tanforan.

**Response.** Please refer to Response 10.25 for a discussion of impacts of traffic congestion on Highway 101 and whether it would cause BART patrons to divert to the Tanforan Station.

- 17.35. BART must add air passenger demand to the parking estimates. San Bruno and other San Mateo County residents should be able to ride to SFIA without paying a premium fare; hence, Mitigation Measure 6.2 must be refined or dropped from consideration.

**Response.** Please refer to Response 10.10 for discussion of airport passenger parking at transit stations and pricing surcharges. FTA does not permit their funding for transit stations to be used to provide parking for airport passengers. The demand for air passenger parking can not be included in the demand forecast because BART will take all steps necessary to prevent this type of parking at the BART stations in South San Francisco, San Bruno, and Millbrae.

- 17.36. With insufficient BART parking, commuter parking would spill-over into the Tanforan Park Shopping Center, Towne Center and/or possibly the Fifth Addition and San Bruno Park residential neighborhoods. This cannot be allowed to occur. Therefore, BART must plan for an adequate year 2010 parking supply, which must include air passengers if a feasible mitigation plan is not prepared with City concurrence.

**Response.** Please refer to Responses 10.10, 14.25, and 14.38 for a discussion of airport passenger parking at transit stations and monitoring and mitigation of spillover parking into local streets.

- 17.37. The parking demand of 1,130 spaces in Table 3.1-95 [of the DEIR/Technical Appendix] cannot be calculated with the station ridership and auto-access numbers shown in Table B-40. BART staff acknowledged that the Table B-40 ridership data are inaccurate for Tanforan Station and provided correct data. However, the inaccurate data are repeated in Table 3.1-7 in the Summary DEIR/SDEIS, and Table 3.1-69 in the [DEIR/J]Technical Appendix.

**Response.** Table 3.1-7, BART Daily Patronage By Station, in the Summary DEIR/SDEIS and Table 3.1-69, Alternative VI, BART Station Daily Volumes, in the DEIR/Technical Appendix, contain summary information from Table B-40, while the parking analysis results presented in Table 3.1-95 report the correct information on parking demand. Revised Table B-40 is provided as part of Response 10.12 above; revised Tables 3.1-7 and 3.1-69 are provided in the FEIR/FEIS.

- 17.38. BART staff say that the error in Table B-40 was a transcription error, and that the error is not reflected in other calculations, such as for traffic conditions. However, it is repeated elsewhere, and traffic estimates for some intersections near Tanforan Station are lower for the "Build"

scenario than for the "No-Build" scenario, which is counter-intuitive. An artificially low estimate for station trip generation could explain this finding. Given the differences in trip generation cited and its potential impact on conditions in San Bruno, BART must adequately determine if Table B-40 was applied to the traffic and transit operating analyses.

**Response.** Please refer to Responses 10.20 and 17.12 for BART's review of the implications of corrections to Table B-40.

17.39. The DEIR/SDEIS does not forecast transit ridership, traffic conditions, or parking needs with a CalTrain downtown San Francisco extension. The 1991 AA/DEIR/DEIS for the BART-SFIA Extension did. BART therefore refers reviewers to that document to identify the relative impact of the downtown extension on BART/transit patronage. This is inappropriate for three reasons: (1) Referring the public to a four year-old document to obtain important, relevant information is highly inappropriate because it inhibits a thorough, efficient review for much of the public. (2) MTC and San Mateo County consider the CalTrain Extension to be a high-priority project, whose market would overlap with that of the BART-SFIA Extension. Therefore, the transit patronage assessment must clearly show how the downtown extension would affect transit ridership, traffic conditions, parking demand, and costs. (3) The alignments of the BART "Build" alternatives and station locations have changed since 1991. Alternative VI was not conceived at that time. Referring reviewers to the old document would not provide an accurate comparison and should therefore be discouraged....The final environmental document must include a detailed assessment of how the CalTrain Downtown S.F. extension would affect BART and CalTrain ridership, and parking demand and needs at the Tanforan BART and San Bruno CalTrain stations.

**Response.** Please refer to Response 11.6 for a discussion of transportation-related impacts to the BART extension with the CalTrain downtown extension.

17.40. Information contained in Chapter 3 (Transportation) and Chapter 6 (Finance) of the Summary and Technical Appendix documents indicates that assumptions had been made regarding re-routing local bus operations to serve the Tanforan Station. The EIR/SEIS should present this information, so reviewers can assess station accessibility via transit for local residents.

**Response.** Please refer to Response 16.126 for a discussion of changes to SamTrans bus operations.

17.41. BART or SamTrans should prepare a map of the proposed feeder bus route network serving Tanforan, and anticipated service schedules.

**Response.** Please refer to Response 16.126 for a discussion of bus route changes as related to the BART build alternatives.

17.42. If BART were in place now (1993), a total of 2,423 BART riders/day (4,846/2) would transfer to bus and 380 would walk for the final leg of their trip, in each direction. By year 2010 these increase to 2,875 and 451, respectively. About 90 percent of the transfers to bus are for work trips. These are enormous numbers, if taken in the context of the North San Bruno Areawide Traffic Study, (1986) which predicted new development would generate a total of 3,253 (mostly auto) trips. Much of that development has not occurred. The shopping centers do not open until after the A.M. peak hours, and traditionally do not attract a high percentage of transit users. Therefore, can BART identify where all these riders are going?

**Response.** The bus and walk access trips to BART were based on MTC's mode choice model. The work trips using bus to access their employment destinations include employment centers in the Oyster Point region which contains many jobs and has bus access from Tanforan Shopping Center as well as bus service along El Camino Real and to downtown San Bruno, both of which have many commercial-related jobs.

- 17.43. What would be the degree of the increase...[of] freeway traffic south of SFIA? Wouldn't future BART patrons be on the freeway anyway (except those diverted from other transit systems such as SamTrans)? Table 3.1-11 [in the DEIR/Technical Appendix] shows that CalTrain Ridership would increase by 24 percent or 9,100 riders over the No-Build scenario. Wouldn't some of these people be diverted from driving?

**Response.** The increase in traffic volumes on Highway 101 south of SFIA are due to some individuals who formerly used buses or CalTrain and would switch to driving to a BART station, as well as other individuals who drove on routes other than Highway 101, such as I-280, who would switch routes to Highway 101 in order to access a BART station.

- 17.44. If the Millbrae interchange becomes congested by commuters headed for the Millbrae Station, to what degree could that result in some commuters continuing onto Tanforan Station along either U.S. 101 or I-280 or even El Camino Real?

**Response.** Please refer to Response 10.25 for a discussion of parking demand at the Tanforan Station and the Millbrae Avenue Station under Alternative VI.

- 17.45. Page 3.1-18 [of the Summary DEIR/SDEIS] (Mitigation Measure 1): Text states that "studies will be performed...". Such a study should have been performed for the DEIR/SDEIS. Proposing to prepare an additional study in and of itself is not a plausible mitigation measure. It may be more appropriate to declare the impact to be significant and unavoidable.

**Response.** The impact referred to on page 3.1-18 of the Summary DEIR/SDEIS was identified as a significant and unavoidable impact. The access mode to BART extension stations was based on the analysis performed by MTC staff who used their mode choice model. Use of this regionally approved model is required by the FTA. The end-of-the-line BART station in the City of Millbrae under Alternative VI and the Alternative VI Aerial Design Option was modeled with a high level of bus feeder service as well as connections with CalTrain to minimize the need for automobile access to this station. In addition, these transit feeder services were deliberately set at service levels to match the MTC-model forecasted demand. The resulting feeder service to the Millbrae Avenue BART Station exceeds feeder service that is supplied to any other BART station. Additional bus feeder services to this station would not be cost-effective and would require special funding to be implemented.

These modeled results for future conditions are best estimates based on existing information. For this reason, study of increased transit service at the time of the BART extension opening would be based on information and conditions that are different from those of today. Such a study would determine the effectiveness of increasing transit service beyond what was forecasted to meet project demand. The supply of transit services alone will not reduce the quantity of vehicle trips.

17.46. Page 3.1-18 [of the Summary DEIR/SDEIS] ([Highway 101] Weaving Section): The analysis examined operations in the “weaving” segment between the San Bruno Avenue collector road on-ramp and the SFIA on-ramp. Movements between consecutive on-ramps are not technically considered “weaving.”

**Response.** The weaving segment analyzed addresses two segments, the segment of Highway 101 between the San Bruno Avenue on-ramp and the SFIA on-ramp and the freeway segment south of the SFIA on-ramp.

17.47. Page 62 [of the Transportation Technical Report]: Text states that the analysis of All-Way Stop Controlled (AWSC) intersections used the 1985 Highway Capacity Manual (Chapter 10)...Why wasn't Transportation Research Circular 373 used? This is a more widely used and accurate method for evaluating conditions at AWSC intersections.

**Response.** The procedure used in the BART extension DEIR/SDEIS was a planning-level method to calculate the traffic impacts for both signalized and all-way stop sign controlled intersections. Both procedures calculate the volume-to-capacity ratio as the measure of the traffic level of service (LOS). The planning level of analysis is similar to that used by the San Mateo Congestion Management District for calculating the LOS at major signalized intersections. The Circular 373 Methodology, referred to in this comment, provides a method to operationally analyze all-way stop sign controlled intersections in a detailed manner that complements the Highway Capacity Manual's detailed operational analysis of signalized intersections. These two operational methods both calculate an average delay per vehicle entering the intersection as a measure of the traffic level of service rather than the volume-to-capacity ratio as used in the DEIR/SDEIS. For an environmental impact report, where an intersection may be signalized in one alternative but an all-way stop in another alternative, it is important to make valid comparisons between alternatives and not to mix delay-based LOS values that would result from using the Circular 373 method with volume-to-capacity based LOS values as used for the traffic analysis in the DEIR/SDEIS.

17.48. The DEIR/SDEIS properly identifies mitigation measures for the El Camino/Sneath intersection which would require BART to contribute a fair share of the cost of the planned improvements, based on the direct project impact identified in the 1988 analysis. This analysis must be confirmed by the City of San Bruno.

**Response.** BART will continue to work with the City of San Bruno to answer questions, provide information, and satisfy concerns whenever possible under the constraints of the project.

17.49. The proposed mitigation (6.1 on page 3.1-161) in the DEIR/Technical Appendix for the Huntington and Tanforan Driveway North must be re-analyzed as a result of the new station area concept plan....

**Response.** The Tanforan Driveway North entrance and exit to Tanforan Shopping Center would be eliminated under the new station area concept plan. The remaining intersections in the immediate vicinity of the Tanforan Station have been reanalyzed.

17.50. BART must implement the following improvements as part of the Tanforan/San Bruno BART station concept plan and provide mitigations for the traffic and circulation impacts:

- BART must contribute its fair share for a traffic signal at the intersection on Sneath Lane at the entrance/exit for Sears/Burger King;
- BART must provide a signalized intersection on El Camino Real at the entrance to Tanforan Park Shopping Center as a mitigation to the deterioration in LOS of El Camino/Sneath as described herein for the Tanforan/San Bruno BART station area concept plan; this signal would eliminate the need for northbound U-turns through the El Camino/Sneath intersection as a result of motorists leaving Tanforan Park Shopping Center on El Camino Real and being limited to right-turn-only maneuvers;
- BART must provide signalized intersections at Huntington/Sneath/BART entrance and at Huntington/BART entrance as described herein for the Tanforan/San Bruno BART station area concept plan; and
- BART must contribute its fair share for a traffic signal on Huntington Avenue (including thru traffic and U-turn traffic and pedestrian access from the Fifth Addition) at the southern entrance to Tanforan Park Shopping Center as described herein for the Tanforan/San Bruno BART station area concept plan.

**Response.** Please refer to Response 17.6 for a discussion of the proposed roadway improvements in the vicinity of the Tanforan Station.

17.51.

The DEIR/SDEIS fails to mention who will pay for "closed circuit television and patrols" to help "patrons feel secure with respect to personal safety and the safety of their vehicles." Under the proposed Tanforan/San Bruno BART station concept plan, BART must pay for any closed circuit television cameras within the BART garage, and the patrols for "personal safety of their vehicles" only works if there is a joint San Bruno/BART/SamTrans police facility as an integral part of the development plan as proposed herein.

**Response.** BART would be responsible for the implementation and maintenance of the Closed Circuit Television (CCTV) system and patrols at the Tanforan Station by BART police.

Please note that the Tanforan Station under Alternative VI and the Alternative VI Aerial Design Option has been revised to include a separate garage from the Tanforan Park Shopping Center garage, and the revised design includes a BART police substation at the Tanforan Station.

17.52.

This analysis of the Tanforan Park Shopping Center is misleading and contains numerous errors:

- Land uses in the vicinity of the proposed Tanforan Station include the fifteen acre site now occupied by the U.S. Navy on the west side of El Camino Real directly opposite the Tanforan Park Shopping Center. This land provides excellent opportunities for future development by private parties or as a joint development project with the Navy.
- The parking spaces to be displaced at Tanforan are located in different areas according to proposed alternatives. Under Alternative VI as contained in the DEIR/SDEIS, the parking spaces are located within the current parking garage adjacent to the Emporium and are used significantly by patrons of the shopping center.
- The shopping center expansion is not limited at present by City height limits; the voters of San Bruno approved an increase in height for the center, as well as the ability to construct parking garages on the site.
- All three majors occupying the Tanforan Park Shopping Center are doing extremely well, with Sears having just completed a \$10 Million investment in their store.
- Intensification of development in the area is more limited due to high levels of noise (over 65 CNEL) from planes taking off from SFO, restrictions on height due to safety zones from planes taking off from SFO, and restrictions contained in the 1993 Airport Land Use Planning Handbook concerning development (restricting residential development in the area).

**Response.** Since it is not known at present when or if the Navy will vacate its site near Tanforan, it is premature to describe that site as available for redevelopment. The displaced parking area referred to on page 3.2-37, Impact 7 of the DEIR/Technical Appendix, applies to the Proposed Project and to Alternatives III, IV and V. No parking would be displaced under Alternative VI.

To clarify the limits on future development at Tanforan Park Shopping Center, page 3.2-37 of the DEIR/Technical Appendix, paragraph five, sentence three is replaced with the following:

Although shopping center expansion is limited at present by high levels of noise from airplanes at SFIA, restrictions on height due to safety zones for planes taking off and landing at SFIA, and changing trends in retail development, it is possible that future retail expansion would be limited by loss of future parking supply.

- 17.53. The BART [Tanforan] station must be designed as an integral part of the shopping center environs. The BART station plan currently contained as Alternative VI in the DEIR/SDEIS fails to achieve such integration and is more reflective of BART stations built in the middle of freeways for sprawling communities in the East Bay....It is imperative that...Tanforan be designed and constructed to enhance the role of the Center as "the single largest sales tax generator to the City of San Bruno." Neither the City nor the Center can afford a BART station which detracts from the center.

**Response.** Please refer to Responses 17.4, 17.5, and 17.6 which describe BART's willingness to integrate the BART station with the Tanforan Shopping Center.

- 17.54. Page 3.2-82 Impact 4 of the DEIR/SDEIS: "...[Under Alternative VI] a third business with approximately five employees may be displaced by the proposed new underpass adjacent to I-380." The City knows the two businesses in the SPTCo right-of-way which would be displaced; it is unclear what the third business is cited above and what the new underpass is adjacent to I-380.

**Response.** Reference to a third displaced business on page 3.2-82 is incorrect and is deleted from Impact 4 of the cited page.

- 17.55. The Final EIR/SEIS must analyze the impacts of any displacement, temporary or permanent, on the parking spaces adjacent to CalTrain tracks between San Mateo Avenue and the CalTrain station, which are used by employees and patrons of businesses in the City's Central Business District (downtown area), including those of Artichoke Joe's Enterprises. Appropriate mitigation measures, including replacement of parking on a one-to-one basis, whether temporary or permanent, must be implemented.

**Response.** Please refer to Response 17.69 for a discussion of replacement parking during construction.

- 17.56. The DEIR/SDEIS states on page 3.2-101 under paragraph three: "Alternative VI would affect a relatively high proportion of minority and lower-income population compared to the city as a whole." It should be expressly noted that all alternatives in the DEIR/SDEIS "affect a relatively high proportion of minority and lower-income population compared to the city as a whole."

**Response.** As seen in Chapter 7, Environmental Justice, the 1992 LPA and the I-380 Least Cost Design Option may result in disproportionate impacts on high-minority neighborhoods. However, none of the other alternatives would create disproportionate impacts on high-minority neighborhoods. The TSM Alternative and all the build alternatives may disproportionately impact low-income neighborhoods.

17.57. The residents of the Fifth Addition would be looking at an 8-foot fence (probably with barbed wire) instead of landscaping or open area. This is hardly an "insignificant impact".

**Response.** Under the Aerial Design Option LPA, the BART alignment will be in a subway configuration through the Fifth Addition neighborhood. Thus, these visual impacts would be avoided. Under Alternatives III, V, VI, and Design Option V-A and V-B, the BART system would be in a retained cut configuration through the Fifth Addition neighborhood.

This impact is discussed in Chapter 7, Environmental Justice. Table 7-2 on page 7-10 of the DEIR/Technical Appendix is revised to include this impact to the Fifth Addition and San Bruno Park neighborhoods under the appropriate alternatives:

Table 7-2, last column, rows seven and eight, are modified to include visual as a significant unmitigable operational impact.

The conclusions in the impact analysis by neighborhood do not change with these additions.

17.58. The area in which the power substation and train control facility would be located (east of CalTrain tracks south of Sylvan Avenue) is adjacent to the Belle Air Elementary School and the Lion's Field playground. Due to these adjacent facilities, the impacts should be re-analyzed and proper mitigations offered.

**Response.** The traction power substation and train control bungalow would be located south of Sylvan Avenue between the SPTCo tracks and the asphalt road adjacent to Lion's Field Park and the Armory. As part of the project, BART will provide landscape screening around the fence line of the ancillary facilities wherever possible (see Figure 2.2-7 on page 2-18 of the DEIR/Technical Appendix). Belle Air School would be separated from the ancillary facilities by the Armory at a distance greater than 400 feet. Existing trees along the western perimeter of Lion's Field Park along with the proposed landscaping by BART along the fence line of the ancillary facilities would partially screen the 15-foot high structures from park users. Visual impacts are not considered significant for this region, so no mitigation measures are necessary.

17.59. It is unclear what the authority of BART would be at a joint-development facility as envisioned for the Tanforan/San Bruno BART Station, although BART does work with local authorities for mutual aid.

**Response.** The responsibilities of BART for police and fire protection are described on pages 3.5-7 through 3.5-9 of the DEIR/Technical Appendix. These responsibilities would not differ with a joint development facility. Please refer also to Responses 14.57 and 16.2.

The joint-use facility at the Tanforan Station is no longer included in designs for any alternative, including the Alternative VI Aerial Design Option. The Aerial Design Option is proposed to include separate facilities for the Tanforan Shopping Center and for the BART Station.

17.60. BART does not accept responsibility for the BART facility during its construction phase. BART does not respond to the malicious mischief calls or the burglaries of the construction site buildings and trailers. This will represent a negative impact on the basic patrol operations of the San Bruno Police Department during construction.

**Response.** The contractor is responsible for construction sites during construction. BART police have formed an Extensions Task Force and they are alerted to all construction sites and regularly patrol these areas.

17.61. BART could have significant impacts on local police operations if San Bruno Police becomes the main, or only, agency to enforce parking mitigation measures, including administering parking permit program in neighborhoods or controlling spill-over parking onto adjacent commercial properties.

**Response.** The commentor's remarks regarding parking permit programs and spillover parking in the San Bruno area are acknowledged. The commentor is correct in stating that BART police are not responsible for parking permit programs and spillover programs occurring outside of BART's jurisdiction; these would be the responsibility of local law enforcement agencies. Mitigation Measure 2.1, Residential Permit Parking, on page 3.1-167 of the DEIR/Technical Appendix addresses this issue.

17.62. Approximately 15 percent to 20 percent of the customers of the Tanforan Park Shopping Center (and the Towne Center) use Huntington Avenue for vehicular access. This figure may be higher during the Christmas shopping season due to heavy traffic on El Camino Real, with major congestion at El Camino Real and Sneath Lane, as well as El Camino Real and I-380. A "Construction Management and Scheduling Program" must be adopted by BART/SamTrans in conjunction with the Tanforan Park Shopping Center (and its various owners) and the City of San Bruno to assure adequate and maximum access to the center at all times, including the potential to construct the BART parking facility in advance of the construction of the BART tracks and station.

**Response.** Prior to construction, BART will consult with each of the local jurisdictions to develop Construction Plans. This collaborative effort is BART's normal practice and is generally described as Mitigation Measure 3.1 of the DEIR/Technical Appendix on page 3.13-54. As part of this process, BART will meet with local staff to determine detour routes, construction staging requirements, distribution of public notices, construction material haul routes, parking limitations, and property access requirements. The intent of the meetings is to develop a Construction Plan that allows efficient construction of BART facilities while maintaining acceptable local circulation and access to the maximum extent possible.

17.63. The DEIR/SDEIS states that Mitigation Measures 7.1 (Deck Half the Streets) and 7.2 (Keep Adjacent Sidewalks Open) for Alternative IV (page 3.13-39) "apply to this alternative and would reduce this impact to an insignificant level." The above-cited narrative specifically states the opposite: that decking would keep half of each street open. Either the DEIR/SDEIS is citing the wrong mitigation measures or explanation of the narrative is incorrect. Moreover, the two Mitigation Measures refer to narrow streets outside the City's Downtown area (although the heading of paragraph seven refers to "downtown San Bruno").

**Response.** Under the discussion of mitigation for Impact 7 on page 3.13-39, the DEIR/Technical Appendix states that the impact would remain significant and unavoidable. The mitigation measures do not reduce the impact to an insignificant level nor is such a claim made relative to this impact as quoted in the comment. The first sentence of Impact 7 on page 3.13-39 is revised to read as follows:

On San Bruno Mateo Avenue and in downtown San Bruno the Fifth Addition neighborhood, construction-related traffic and pedestrian delay would have significant impact.

17.64. San Bruno Avenue and Angus Avenue provide essential access to the Belle Air neighborhood, the Belle Air Elementary School, the intensively used Lion's Field recreation area, and the Central Business District (Downtown area) of San Bruno....Temporary closings will result in delays for police and fire emergency response to the Belle Air neighborhood. The timing of any closure of Angus Avenue is critical and should accommodate the school year and any scheduling of outdoor activities at Lion's Field.

**Response.** During the construction of the cut-and-cover subway under both San Bruno and Angus Avenues, traffic would be restored for these streets by decking over the construction area. The decking would be the full width of the existing traveled area plus a four-foot width for pedestrians along each side of the street. After the subway box is complete and the trenching has been back-filled, the paved street and pedestrian areas would be restored to their former width and condition.

- 17.65. In the event...that the bored tunnel option is not feasible as an integral part of the BART extension project, then BART must also consider creating permanent street improvements at San Bruno Avenue (new lanes north and south of the existing ones) which would remain to serve as dedicated right lanes or improved through lanes; creating a permanent relocation of the existing Angus Avenue across CalTrain immediately south of the existing street to create a new crossing which would be in a straight line with Angus Avenue east of the CalTrain tracks.

**Response.** Significant construction impacts to traffic on Huntington, San Bruno Avenue, and other local streets in this vicinity would be mitigated. BART would not permanently realign Angus Avenue to eliminate the existing jog, because the BART alignment does not significantly impact either the Huntington/Angus or First/Angus intersections.

- 17.66. Problems and omissions exist with the DEIR/SDEIS for cost evaluation. The first cost omission is that no comparative price is stated for the VI-Cut/Cover versus VI-Bored/Tunnel....The second cost omission is that no specific mitigation cost accruals are listed or traceable for the myriad of municipal and private and state/federal agency potential BART impacts.

**Response.** For a discussion of the cost of the bored tunnel construction option, please see Response 17.68. For a discussion of various types of mitigation costs, see Response 14.100. For a discussion of mitigation costs and public agencies, please see Response 66.105.

- 17.67. A.J. Moore Associates concluded that the tunnel route cost used (\$15,000/linear foot) does contain enough for utilities, but that the cut/cover and retained cut portions at Tanforan and through Downtown are insufficient to cover impacted utility system rebuilding.

**Response.** Utility relocation costs through San Bruno are covered by the right-of-way line item in the estimates shown in Table 6-1 of the DEIR/SDEIS. The cost estimates were determined as a percentage of right-of-way costs, not by using a linear foot rate, and are adequate to cover required utility relocation costs.

- 17.68. Based on independent engineering studies conducted by the firm of A.J. Moore Associates, the bored tunnel option through downtown San Bruno is physically and engineering feasible. It is also as cost efficient as cut-and-cover, will take less time to construct, and will avoid the numerous and significant impacts on safety, environmental, social, and economic conditions cited in this report. BART has the obligation to mitigate these impacts; implementation of the bored tunnel option properly mitigate these impacts.

**Response.** A bored tunnel through downtown San Bruno is a possible construction option to the cut-and-cover construction method described under Alternative VI. This option is not feasible for the following reasons:

1. As discussed in the DEIR/Technical Appendix in Table 2.3-1 on page 2-78, the bored tunnel option is approximately \$25 million more expensive than the cut-and-cover method.

The AJ Moore Associates report attached to the commentor's letter claims lower mitigation costs for tunnel option construction in the following categories:

Downtown Utilities:	\$9.0 Million
Property Damage:	
Belle Air	\$1.0 Million
Downtown	\$8.6 Million
Total	<b>\$18.6 Million</b>

With respect to utilities, investigation by BATC, BART's general engineering consultant, indicates that the eight utilities identified by the commentator are located in the adjacent streets or the SPTC right-of-way. The utility relocation savings for the tunnel option is in the range of \$1 million for the segment from Euclid Avenue to Sylvan Avenue. Reconstruction would be required only at crossings of the BART structure. The proposed CalTrain shoofly would remove the southbound track from service and allow the trains to operate in two directions on the northbound track. In no case would a shoofly track be located over a liquid gas or fuel pipeline. With respect to property damage, there is no justification in the report for the cost savings of \$9.6 million.

2. As discussed in the DEIR/Technical Appendix in Section 3.13-2, Construction Scenario, tunnel construction activities on the surface will be concentrated at the triangular plot bounded by I-380, the CalTrain tracks, and Huntington Avenue. These activities will occur for 24 hours per day, five days per week, with some maintenance and surveying activities on the weekend for approximately two years, and will include the stockpiling and hauling of excavated earth materials and supplies, and use as a reporting area for tunnel workers,
3. As discussed in the DEIR/Technical Appendix on page 2-20, tunnel ventilation structures will be required in the vicinity of Sylvan Avenue and Euclid Avenue. These structures will be similar to Figure 3B on page 143 of the Design Appendix and will be constructed by cut-and-cover.
4. According to the DEIR/Technical Appendix on pages 3.6-34 and 3.6-35, the tunneling operations may cause settlement on the surface which may require some repair work on existing pavements and utilities. The amount of settlement cannot be estimated until soil borings are performed as part of preliminary engineering.

In general, tunnel construction is feasible only where cut-and-cover construction is impossible due to depth, soil conditions, or uninterrupted surface activities such as freeways or airports.

- 17.69. The DEIR/[Technical Appendix] fails to address the last impact stated under paragraph seven on page 3.13-47: "The parking area between Huntington Avenue and the CalTrain track would be temporarily closed." In fact, the Mitigation Measures cited under this paragraph refer only to streets and not to the parking...[which] is leased by the City of San Bruno and Artichoke Joe's Enterprises for the crucial parking needed by Artichoke Joe's and for employee and customer parking for the small businesses in the Downtown area. Any temporary loss of this parking will have significant negative impacts on the retail sales in the Downtown area and on the revenues of Artichoke Joe's. The downtown area is dominated by small and minority-owned businesses. Loss of vehicular access or loss of employee or customer parking could be severely damaging for this area.

**Response.** The City and County of San Francisco owns the property that has been used as a parking area between Huntington Avenue and CalTrain. In 1990, the City and County of San Francisco, through the San Francisco Water Department, entered into a revocable "land use permit" granting use of the property to the City of San Bruno. Under the express terms of this agreement, use of this property may be revoked at any time at the option of the City and County of San Francisco. The City of San Bruno in turn entered into a revocable permit granting limited use of the property as a vehicle parking area.

On April 9, 1996, the City and County of San Francisco issued a 120 day notice to revoke use of this property. Therefore, parking may no longer be permissible in this area. The revoked permits contain no expectation or requirement for replacement parking to be provided. However, a replacement parking plan would be coordinated with the City of San Bruno to address local concerns regarding other loss, if any would occur due to the construction of the project, of vehicular access and employee or customer parking in Huntington Avenue-downtown area. Additional parking spaces to accommodate displaced parking, if any, would be provided through the following or equivalent measures, to be approved and implemented in coordination with the City of San Bruno:

Expanded use of downtown parking spaces. A combination of the following or equivalent measures would accommodate displaced parking, if any, along Huntington Avenue:

- (i) existing downtown public lots would be restriped and reconfigured to create additional spaces;
- (ii) additional parking spaces would be created on vacant city property on Huntington Avenue;
- (iii) existing spaces in private lots along Huntington Avenue, south of San Bruno, and along San Bruno Avenue and First Street would be subleased; and
- (iv) parking restrictions in existing downtown lots would be revised to allow greater use.

BART would pay only for the actual costs incurred in implementing any replacement parking plan.

17.70. It must be specifically understood that any agreement on local haul routes in San Bruno shall require, among other things, the following: Hauling contractors transporting materials upon City streets shall obtain hauling route permits from San Bruno, with such contractors subject to assessments, charges and proof of liability insurance established by the City for hauling route permits;...BART/SamTrans shall require its construction contractors and subcontractors to apply for and secure permits from the City for all work to City facilities and street closures within the jurisdiction of the City and pay applicable fees therefore;...In addition, any laydown area involving City-owned land or right-of-way shall be subject to fees, charges, assessments and/or reconstruction requirements by the City on BART/SamTrans and its contractors and subcontractors.

**Response.** An agreement with the City concerning hauling routes and temporary street closures, among other items, will be negotiated. This agreement will cover the procedures and cost for the contractors to obtain permits.

17.71. The DEIR/SDEIS for Alternative VI does not adequately address the construction impacts nor the project impacts on Huntington Avenue south of I-380. Traffic studies do not appear to have been performed for Huntington Avenue, which serves the Tanforan Park Shopping Center, the Towne Center, and San Bruno's Downtown area.

**Response.** Access along Huntington Avenue would remain open during construction of the BART alignment through San Bruno under all of the BART build alternatives. The revised plan for the Tanforan Station under Alternative VI and the Alternative VI Aerial Design Option includes the BART tracks crossing Huntington Avenue, just south of the Sneath/Huntington intersection and again just south of Forest Lane. BART would be in a subway alignment throughout this segment and would not permanently affect these streets. A bypass street that would parallel Huntington Avenue from south of Euclid Avenue to immediately north of the I-380 undercrossing would be built to provide access during construction of the crossing by the BART

alignment under Huntington Avenue south of Forest Lane. Such a bypass street would be operational before the temporary closure of the affected portion of Huntington Avenue. Similarly, the connection between Forest Lane and Herman Street would also remain open by diverting traffic to the south by approximately 50 feet and then to the north on a temporary street. Please refer to Response 17.69 for a discussion of replacement parking during construction.

- 17.72. Huntington Avenue between San Bruno and San Mateo must also be improved or reconstructed to the same design standards as part of the BART project.

**Response.** Please refer to Response 17.29 for a discussion of traffic impacts to Huntington Avenue between San Bruno and San Mateo Avenues.

- 17.73. The DEIR/SDEIS fails to even attempt to address the critical issue of limiting access to businesses in and around the downtown area of San Bruno and the continuation or replacement of parking for patrons of Artichoke Joe's and employees and customers of small businesses in the City's downtown area.

**Response.** Please refer to Responses 17.64 and 17.69 for a discussion of parking and access to business.

- 17.74. The DEIR/SDEIS fails to acknowledge the importance of maintaining access on Angus Avenue for school children attending Belle Air Elementary School or crossing from the Belle Air neighborhood to higher level schools, or children using Angus Avenue to use Lion's Field Park....Angus Avenue must remain open or a pedestrian bridge must be put in its place to assure adequate safety of children.

**Response.** Temporary decking would be constructed in order to maintain continued two-way vehicular traffic operations and pedestrian movement during construction of the BART extension. Flaggers would control vehicle movement across the one-lane roadway during this construction activity. The decking of the street would include sidewalks with fences on the outside of the sidewalks adjacent to construction activities. Construction of this deck on Angus across the CalTrain right-of-way would require approximately two to four months depending on the extent of utility relocation needed. Other than the formal access points across the CalTrain tracks, pedestrian access across the CalTrain track would be prohibited during construction by fencing to be constructed and maintained by the project sponsors. Please also refer to Response 17.65 for a discussion of realigning Angus Avenue.

- 17.75. An analysis was performed for the short-term construction impacts on the fiscal integrity of the stores in the downtown and along the construction route under Alternative VI....A total of 81 establishments generating retail sales taxes would be affected, resulting in a 12-month loss of about \$120,000 of sales tax revenues to the City of San Bruno.

**Response.** The analysis conducted by Bay Area Economics suggested a possible one-year loss of approximately \$120,000 in sales tax revenue to the City, approximately two percent of the City's sales tax revenue. This is based on the assumption that affected stores would lose 15 to 30 percent of their sales for a one-year period. The analysis also indicates a larger long-term increase in sales tax revenue as a result of BART station proximity to the retail stores.

- 17.76. A revolving loan fund capitalized by BART and SamTrans should be created to be made available to businesses experiencing a demonstrable loss of sales during the construction period. This loan fund should enable low or zero interest loans to be made to affected businesses to ease their cash flow and profitability declines during the construction period.

**Response.** As described on page 3.2-57 of the DEIR/Technical Appendix, BART/SamTrans would address demonstrable loss of income to businesses in accordance with State and federal relocation laws as applicable. Establishment of a revolving loan fund is a local funding issue separate and apart from BART/SamTrans obligations as required under the federal and State relocation law.

- 17.77. Use of any portion of Lion's Field Park, which is partially owned by the City of San Bruno and partially owned by the San Bruno Park School District, is totally unacceptable.

**Response.** The commentor is expressing rejection of Alternative VI; this comment is also applicable to Alternative V-A. The DEIR/SDEIS describes the disruption of Lion's Field Park as a significant impact which cannot be entirely mitigated.

- 17.78. "Relocation of the San Bruno CalTrain Station to the Tanforan Station site and construction of a temporary shoofly would temporarily alter the visual setting east of Huntington Avenue but would not occur within 60 feet of sensitive receptors; there are no significant views or well-defined streetscapes, and the SFIA property west of Highway 101, identified as a scenic resource, would not be affected." Under Alternative VI, the CalTrain Station is not proposed to be relocated to the Tanforan Station site. This impact is in error.

**Response.** As noted by the commentor, relocation of the San Bruno CalTrain Station is not part of Alternative VI. However, the San Bruno CalTrain Station will be temporarily moved to the I-380 site during construction. Accordingly, page 3.13-82, Impact 5 of the DEIR/Technical Appendix is revised as follows:

5. *Relocation of the San Bruno CalTrain Station to the Tanforan Station site and Construction of a temporary shoofly would temporarily alter the visual setting east of Huntington Avenue but would not occur within 60 feet of sensitive receptors; there are no significant views or well-defined streetscapes, and the SFIA property west of Highway 101, identified as a scenic resource, would not be affected. (I)*

- 17.79. The DEIR/SDEIS fails to state that the sensitive receptors of homes and a church along Huntington Avenue in the San Bruno Park neighborhood would be significantly and unavoidably impacted by the "feeling of encroachment."

**Response.** Under Alternative VI, the BART alignment would be in a retained cut configuration between Forest Lane and Euclid Avenue, adjacent to the San Bruno Park neighborhood, before descending into a subway configuration. The retained cut wall would be visible to residents along Huntington Avenue in this stretch only, but would be greater than 60 feet from sensitive receptors. As stated in Impact 12 on page 3.3-88 of the DEIR/Technical Appendix, this wall would not disrupt significant views. To further clarify the impact to sensitive receptors under Alternative VI, the following sentence is added to the paragraph below Impact 12 after sentence four:

The retained cut wall would be visible to residents along Huntington Avenue between Forest Lane and Euclid Avenue but would be greater than 60 feet from sensitive receptors.

- 17.80. Construction impacts/visual quality - Huntington Avenue & San Antonio Avenue. All existing trees along the east side [of] Huntington and San Antonio Avenues and those adjacent to the CalTrain tracks on the west side must be retained. These trees not only provide some degree of screening of the proposed laydown area, but also provide a natural sound barrier to the noise impacts of the adjacent SFIA. This sound screen is essential to the quality of life of the residents of the Lomita Park residential area.

**Response.** Trees and other flora, although visually appealing, generally have little or no effect on noise levels except where vegetation is dense for a sufficient distance away from the noise source. It is a common misconception that a single row of trees will noticeably affect noise levels. The construction noise limits and construction noise mitigation measures (see DEIR/Technical Appendix, pages 3.13-161 and 162) are more important for mitigating construction noise. Under Alternatives IV and VI only, trees along Huntington and San Bruno Avenue would not be affected. Because the alignment in this stretch would veer east of the CalTrain corridor to the San Francisco International Airport, these trees would be retained.

- 17.81. Construction impacts/visual quality - Huntington Avenue/Euclid Avenue laydown area: A church and numerous residences are located on the west side of Huntington Avenue in the area to be utilized for a contractor laydown area. The church is almost directly opposite the proposed Euclid tunnel portal. Several large pine trees currently screen this area from the church and residents. A mitigation is required.

**Response.** Trees and other vegetation will be removed only within the construction easement as necessary to provide access and construct the line segment. Mitigation Measure 1.4, i.e., Laydown Area Visual Barrier, is recommended for Alternative VI on page 3.13-83 of the DEIR/Technical Appendix, which would partially reduce the impact to scenic resources.

- 17.82. The large pine trees along Huntington Avenue should be preserved for the longest time possible to screen any temporary construction activities.

**Response.** Please refer to Responses 17.80 and 17.81 for a discussion of the preservation of vegetation.

- 17.83. The tunnel construction option in Alternative VI would only occur in the downtown area. It would keep open the key streets of San Bruno Avenue and Angus Avenue. Keeping these streets open for police, fire, and emergency service access would not have the same emergency response impacts as the cut-and-cover method of construction.

**Response.** As noted by the commentor, tunnel construction in general would have fewer impacts on streets than the cut-and-cover construction method. This observation is further validated by Table 3.13-2 of the DEIR/Technical Appendix, which defines the approximate duration of lane restrictions under the various alternatives and design options. In downtown San Bruno, however, Table 3.13-2 shows minimal differences between cut-and-cover and tunnel construction techniques. Under both scenarios, there would be no lane restrictions on Angus Avenue. Under the cut-and-cover construction technique, San Bruno Avenue would have two lanes closed while the roadway was decked. This restriction would last for one month. In contrast, there would be no restrictions with the tunnel construction option. Because of the layout of streets in the vicinity of San Mateo, San Bruno, and Angus Avenues, emergency response vehicles would continue to have access to this area, even with cut-and-cover construction. Accordingly, it is not necessary to modify the DEIR/Technical Appendix, which indicates on page 3.13-52 that the impacts of tunnel construction option would be similar to those identified for cut-and-cover construction.

- 17.84. Conflicts exist between BART and gravity systems, i.e., wastewater and sewer. Modifying these facilities will entail costly and complex re-routing and installation of power hungry pump stations, or both. It is vital that all utility service be continuous and uninterrupted during construction. Water for domestic, commercial and fire protection is essential.

**Response.** The DEIR/SDEIS describes the different procedures BART will employ to minimize the effects of utility relocations. The likely duration of interruption, if any, is first described on page 3.13-102 of the DEIR/Technical Appendix. The mitigation measures noted, beginning on the same page, would reduce potential impacts to an insignificant level.

17.85. During construction, the City anticipates major collateral damage to public infrastructure, including water, wastewater, storm drainage, streets, street lights, signals, curbs, gutters and sidewalks, landscaping, and the City-owned cable television lines. These issues must be specifically addressed in the final design and Memorandum of Understanding between BART/SamTrans and the City of San Bruno, as well as in any encroachment permit.

**Response.** There is no evidence of major collateral damage to public infrastructure. Utility relocations will be discussed among BART, utility owners, and local jurisdictions. Issues related to liability for damages to public infrastructure during construction are addressed by agreements, or Memoranda of Understanding, between BART and SamTrans and the cities.

17.86. It should be specifically noted that a major fuel line serving the San Francisco International Airport is located near Walnut Street. It should also be specifically noted that the City of San Bruno owns and operates the cable television operations and must be notified as part of the utility and facilities agreements.

**Response.** Information regarding major lines in the San Bruno area is appreciated. As noted on page 3.13-11 of the DEIR/Technical Appendix, BART will collect information and perform field verifications of all affected utilities during the preliminary engineering phase. Any disturbance to these utilities will be coordinated with each utility agency, including the City of San Bruno, owners of a cable television operation.

17.87. Local jurisdictions, including the City of San Bruno, should not have to incur any costs for designing relocation of utilities and facilities, or for bearing costs for providing temporary backup services. BART/SamTrans must bear all costs for relocation of utilities, inducing design costs, or for providing temporary backup services, such as providing bottled water or a water tank.

**Response.** The costs for design and reconstruction of existing City facilities (streets, utilities) due to the construction of BART facilities would be funded as a part of project costs. The City would bear the costs for new facilities not related to BART or improvements to existing facilities. The division of responsibilities will be made explicit in an agreement between BART, SamTrans and the City.

17.88. It is essential that the aquifer from which the City draws 52 percent of its water supply be protected. BART must properly locate all sources of potential contamination, including fuel tanks and SFO fuel line, and provide adequate mitigations to protect leakage of contaminates into the aquifer during construction.

**Response.** The relocation of existing potential sources of groundwater contamination, such as fuel pipelines and storage tanks, will be done in accordance with the latest regulations concerning spill prevention and containment.

17.89. The DEIR/SDEIS fails to address the cumulative impacts of the airport expansion and the BART extension in the context of S.B No. 1453 and CEQA, including the use of the more restrictive noise threshold of 1.5 dB for establishing significant impacts.

**Response.** Senate Bill 1453, which added Section 21096 to the Public Resources Code in 1994, requires lead agencies to use the Division of Aeronautics's Airport Land Use Planning Handbook as "technical resources to assist in the preparation of the environmental impact report as the report relates to airport-related safety hazards and noise problems." The threshold figure cited in this comment arises from the following passage on page 7-19 of the Handbook:

As a guideline for considering when such changes might be significant and thus require thorough environmental impact review, the FAA has established a screening criterion. In noise-sensitive locations where the DNL already exceeds 65 dB, an increase of 1.5 dB is deemed the threshold of potential significance (FAA, 1986).

Thus, the handbook does not set 1.5 dB as the threshold for establishing significant impacts, but rather it sets 1.5 dB as the threshold for determining whether a thorough environmental impact review is required. BART and SamTrans have undertaken such a review of the environmental impact of the proposed extension, including a thorough review of cumulative noise impacts. Please refer to pages 3.9-32 and 3.9-33 of the DEIR/Technical Appendix.

- 17.90. The DEIR/SDEIS fails to provide the public [with] a full understanding of the noise issues as they exist near BART alignments and BART stations, as they are impacted cumulatively by the airport expansion and the BART extension, and as they restrict or promote growth-inducing impacts of specific land uses.

**Response.** In the DEIR/SDEIS, noise impacts have been identified, affected receptors have been indicated, and the DEIR/SDEIS indicates where significance criteria would be exceeded. Where criteria are projected to be exceeded, appropriate and feasible noise mitigation is presented. BART is committed to mitigating significant noise impacts and presents the requisite noise mitigation measures to accomplish this result. Cumulative noise impacts are also discussed and mitigation of BART's contribution to the cumulative noise impacts will be implemented.

- 17.91. The DEIR/SDEIS fails to mention A.B. No. 3152, a California Act to add Article 8.5 (commencing with Section 65460) to Chapter 3 of Division 1 of Title 7 of the Government Code, and to add Section 3334.19 to the Health and Safety Code, relating to land use, as approved by the Governor on September 24, 1994 and filed with the Secretary of State on September 26, 1994.

**Response.** A.B. 3152 encourages the development of "transit villages," mixed use and higher density development in the vicinity of transit stations. It does not supersede local planning control of sites outside of BART ownership.

- 17.92. On Revised page 7-12 [of the Summary DEIR/SDEIS] a definition of "high-minority" is provided, as well as guidance on what constitutes "low-income." No definition or guidance is provided, however, for what constitutes "disproportionate."

**Response.** Both the Summary DEIR/SDEIS and the DEIR/Technical Appendix define the term "disproportionate." For purposes of BART's analysis of environmental justice impacts, the term "disproportionate" is used to refer to the proportion of "impacts of a particular alternative that affect high-minority and low-income neighborhoods as compared to the proportion that affect other neighborhoods in the project corridor." For addition details, please refer to the Summary DEIR/SDEIS, page 7-2, footnote 1, and the DEIR/Technical Appendix, page 7-3, footnote 1.

- 17.93. If all feasible build alternatives travel "through a similar group of project corridor neighborhoods," why is there such an effort to assign weights to impact as is done at the bottom of revised page 7-12 [of the Summary DEIR/SDEIS] to artificially create "disproportionate" impacts?

**Response.** The intent of this "weighting" of impacts is not to artificially create disproportionate impacts. Rather, it is designed to gauge the different impact on individuals and the community-in a given neighborhood -- from potential (i) relocation, (ii) exposure to impacts from operation of BART trains and (iii) short-term impacts from construction. The analysis in the DEIR/SDEIS accords the most weight to the first of these factors and the least to the third. Without such "weights," the impact to a person being permanently displaced from his/her home would be considered equivalent to the impact to a person from exposure to short-term construction impacts.

17.94. According to the revised pages for the DEIR/SDEIS, Executive Order No. 12898 mandates the avoidance of disproportionate impacts on high-minority neighborhoods, but only requires that to the extent practicable impacts shall be identified and addressed, as appropriate, for low-income communities. Thus, using such logic, impacts on the Fifth Addition should be avoided, while impacts on the Belle Air neighborhood need only be identified and addressed, as appropriate. This is not the intent nor the spirit of Executive Order No. 12898....Executive Order No. 12898 clearly and consistently treats "minority populations" and "low-income populations" equally. For the DEIR/SDEIS to state that the Executive Order requires avoidance of impacts of high-minority neighborhoods but only disclosure of impacts for low-income neighborhoods is a gross misinterpretation of the Executive Order.

**Response.** Executive Order No. 12898 requires agencies to identify and address, as appropriate, disproportionate effects to minority and low-income populations. However, the Executive Order's requirement to conduct activities in a certain manner applies only to "race, color, or national origin." This approach is consistent with civil rights legislation, such as Title VI of the Civil Rights Act of 1964.

To the extent that the project sponsors have distinguished between impacts on high-minority and low-income communities, they have done so to reflect this distinction. Nonetheless, the project sponsors have revised the appropriate language in the DEIR/Technical Appendix (page 7-20) in order to eliminate any confusion on this point:

As discussed above, the proposed project, and the I-380 Least-Cost Design Option, and Alternative VI may result in disproportionate impacts on high-minority neighborhoods. However, none of the other alternatives would create disproportionate impacts on high-minority neighborhoods. Accordingly, the No Build, TSM and Alternatives III, IV, V, Design Options V-A and V-B, and Alternative VI appear to be consistent with the mandate of Executive Order No. 12898 to avoid disproportionate impacts on high-minority neighborhoods.

The TSM alternative and all the build alternatives may disproportionately impact low-income communities. However, with respect to low-income communities, the Executive Order only requires that "[t]o the extent practicable" such impacts shall be "identified and address[ed], as appropriate...." Although all of the impacts discussed in this section are unmitigable, these impacts have been appropriately addressed by identifying and analyzing a reasonable range of alternatives (see Chapter 2). Within the reasonable range of alternatives, only the No Build Alternative would not impose disproportionate impacts on low-income communities in the study area.

With respect to high-minority and low-income communities, Executive Order No. 12898 requires that "[t]o the extent practicable" such impacts shall be "identified and address[ed], as appropriate...." All of the impacts discussed in this section are unmitigable and these impacts have been appropriately addressed by identifying and analyzing a reasonable range of alternatives (see Chapter 2).

## 18. CITY OF SAN BRUNO CITY COUNCIL

- 18.1. This letter will serve to notify you that the decision by San Bruno Mayor Simon, Vice-Mayor Pallas, Council members Barnard and Franzella at the November 3, 1994 San Bruno City Council meeting to support the Alternative VI Tanforan Station option for the proposed extension of BART to the San Francisco Airport is not acceptable to me (San Bruno Council member Bill Baker)....I do not support Alternative VI.

**Response.** The commentator's opposition to Alternative VI is noted and was considered by the BART and SamTrans boards during the LPA selection process at the close of the public review period. Nonetheless, both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for further discussion of the selected LPA.

- 18.2. At \$28.76/new rider, Alternative VI is the second most costly BART alternative for attracting new riders to BART. This measurement is especially revealing with respect to the economic inefficiency of Alternative VI when it is compared to [Design] Option V-B, which is the least expensive build alternative at \$19.41/new rider....Alternative VI is not a cost effective way for BART to attract new riders.

**Response.** The Cost Effectiveness Index (CEI) provides a means of comparing the benefits of each alternative with its costs. The formula relates capital and operating costs to benefits in the form of travel time saving for existing transit riders and attraction of new riders to transit. The lower the cost per new transit rider the more cost effective an alternative is. Alternative VI shows the second highest cost effectiveness index measure of the alternatives under review, with Design Option V-A showing the highest CEI. The cost effectiveness index is principally a mechanism used by FTA to compare projects competing for federal support.

The commentator states, "Alternative VI is not a cost effective way for BART to attract new riders." This statement is based on the mistaken assumption that the CEI measures cost effectiveness of attracting riders to BART. The CEI is designed to measure the cost effectiveness of attracting new riders to regional transit, and cannot respond to the concern of the cost of attracting riders solely to BART. For example, a CalTrain rider who becomes a BART rider is not counted as a "new rider" in the CEI. FTA does not have a fixed CEI that a project must achieve in order to be funded. As described above, the CEI is one measure of comparison evaluated by FTA when transit projects in different geographic locations apply for federal funding in the same period.

- 18.3. BART's management created a deadline for the submission of plans last year yet, they have continued to add new plans. BART can't even stick by the rules that they set. By their own admission, BART's management can't do anything without FTA approval, they have no money of their own, hardly any authority, and they refuse to reduce agreements to writing.

**Response.** Please refer to Section 1.1, Historical Overview, of the DEIR/Technical Appendix for discussion of the project analysis process. Volume I of the FEIR/FEIS expands on this historical review with further explanations regarding delays to the project and FTA's approval.

## 19. CITY OF SOUTH SAN FRANCISCO

- 19.1. We would like to note our disappointment that a request from the San Mateo City and County Association of Governments (CCAG) for additional time to review the voluminous environmental document was not granted. Our review was seriously impeded for three weeks due to a delay by BART in providing the traffic data needed by the local jurisdictions for their review. In addition, the sheer volume of material provided for review and the numerous reference documents alluded to in the base document warrant an extended review period.

**Response.** Please refer to Response 10.2 for a discussion of the length of the comment period.

- 19.2. In April 1994, the South San Francisco City Council adopted a resolution supporting Alternative VI as the alignment which will best serve the people of the region by properly mitigating the operational impacts of the system and providing direct access into the airport.

**Response.** The commentor's support of Alternative VI is noted. Public opinion was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Please refer to Response 2.7 for a discussion of the selection of the Alternative VI Aerial Design Option as the new LPA.

- 19.3. Forecasts for the Hickey Station ridership contained in the DEIR are inaccurate, and are actually 50 percent higher than indicated.

**Response.** Forecasts for the Hickey Station ridership are based on MTC's travel demand model and the estimates are believed to be accurate. If the reference in this comment is to the information on auto access reported in Table B-40, then the typographical errors have previously been discussed. A revised version of Table B-40 follows Response 10.12.

- 19.4. In many cases, the EIR shows Levels of Service to be two levels better than the earlier City study.

**Response.** The study commissioned by South San Francisco was performed by Wilsey Ham and differed from the traffic analysis in the BART extension DEIR/SDEIS in three respects. The level of service methodology used in the Wilsey Ham study was based on the 1985 Highway Capacity Manual published by the Transportation Research Board, while the methodology in the DEIR/SDEIS were based on that used in the San Mateo County Congestion Management Plan. The intersection turning movements in the Wilsey Ham study were based on traffic counts taken in July 1991 that were adjusted to school day conditions. After estimating the quantity of BART-related trips and their trip distribution, Wilsey Ham manually added these BART-related vehicle trips to the roadway network. The trip distribution for BART-related trips in the DEIR/SDEIS were based on MTC's travel demand model and the traffic counts were performed during school days during 1993. A comparison between the two studies found that the DEIR/SDEIS has slightly higher traffic volumes during the A.M. peak hour and the Wilsey Ham study has slightly higher traffic volumes during the P.M. peak hour.

- 19.5. Projections for traffic volumes at intersections near the Tanforan and Hickey Station are shown to be higher for the "No Build" alternative than for the "Build" scenarios, meaning BART shows that its project will decrease traffic volumes through the intersections near the station. The City finds this illogical and unjustifiable.

**Response.** The No Build Alternative does not include the Hickey Extension from El Camino Real to Mission Road, which is part of the BART extension project, or from Mission Road to Hillside Avenue, which is a planned improvement by San Mateo County. The Hickey Extension results in significant traffic redistribution that will increase traffic on Hickey Boulevard and decrease traffic on El Camino Real at the intersection of these two arterial streets. The volume of traffic with the Hickey Extension will also decrease on all legs of the Mission Road/Evergreen Road intersection because the new intersection of Mission Road/Hickey Boulevard will divert traffic. Regarding traffic volumes at the Tanforan Station, please refer to Response 17.15.

- 19.6. The traffic analysis is deficient in its estimation of impacts and provision of mitigations...around the Hickey Station: Hickey Extension/El Camino Real; Hickey Extension/Mission Road, Hickey Extension/Hillside Boulevard, New Street/El Camino Real, [and] Hickey Station Exit/Hickey Extension.

**Response.** The estimation of traffic impacts was carefully performed around the Hickey Station as well as at all stations and intersections under all alternatives. New traffic signals are included in the design of the Hickey Extension/El Camino Real, Hickey Extension/Mission Road, and New Street/El Camino Real. The Hickey Station Exit/Hickey Extension intersection does require further mitigation to the original design. Design changes to the Hickey Station layout as displayed in the BART extension DEIR/SDEIS are being made. These design changes to the layout of the Hickey Station were made to reflect some suggestions provided by the City of South San Francisco. These specific suggestions for changes at the Hickey Station are addressed in Responses 19.149, 19.150, and 19.151.

The proposed intersection of Hickey Extension/Hillside Boulevard is a planned improvement of San Mateo County and will not be significantly impacted by traffic related to the BART extension.

- 19.7. If the Mission-Hillside extension is not constructed, traffic conditions with the BART station would reach unacceptable levels along Chestnut Avenue, Grand Avenue, and Evergreen Road. It is therefore critical that the EIR identify that the Hickey Boulevard Extension is a necessary mitigation for the proposed project.

**Response.** The traffic impacts in the DEIR/SDEIS assumed that Hickey Boulevard would be extended from El Camino Real to Hillside Boulevard. Even if the Hickey Boulevard Extension were constructed only between El Camino Real and Mission Road, and not between Mission Road and Hillside Boulevard, the diversion of traffic to other roadways would not be significant. The level of service at the Mission/Evergreen intersection would be LOS C during the A.M. and P.M. peak hour in the year 2010 without the Hickey Extension between Mission and Hillside. The incremental increase on Evergreen of not constructing this segment of the Hickey Extension is 70 vehicles in the westbound direction and 280 eastbound vehicles during the A.M. peak hour and 500 vehicles in the westbound direction and 100 eastbound vehicles during the P.M. peak hour. Of these traffic increases on Evergreen Road, most would be due to the new street connection between Mission Road and El Camino Real, and not to traffic associated with the Hickey Station. Traffic related to the Hickey Station on Evergreen Road would be in the westbound direction during the morning peak period and eastbound in the afternoon peak period. The traffic impacts to Chestnut Avenue between Hillside and El Camino Real are also insignificant without the Hickey Extension between Mission Road and Hillside Avenue. During the A.M. peak hour, 45 westbound vehicles would be added to Chestnut Avenue compared to the number of westbound vehicles under Alternative VI, and during the P.M. peak hour 12 vehicles would be added compared to traffic volumes under Alternative VI. Less than 10 vehicles would be added to Grand Avenue between Mission Road and Chestnut Avenue during either the A.M. or P.M. peak hours and would not cause significant traffic impacts.

- 19.8. BART's vertical alignment design causes South Spruce to be elevated to an overpass, but the overpass has been designed to accommodate a speed of only 25 mph. This roadway is a major arterial through the City and a 25 mph design is unacceptable. The BART line must be lowered at this point to permit a minimum 40 mph...

**Response.** The 1992 LPA Report included the raising of South Spruce Avenue for two reasons: (1) to maintain the flow lines of the gravity sewers and open waterways, and (2) bring BART to the surface as soon as possible south of Spruce Avenue to reduce construction costs. This concept was carried forward in all of the current alternatives. BART staff recognizes the impact of reducing the design speed on South Spruce Avenue to 25 mph and has a new design of the alignment that will mitigate this impact. BART proposes to depress the profile of the tracks at South Spruce Avenue, and maintain the current grade of South Spruce Avenue and the flow lines of the gravity sewers and open waterways under Alternative VI, as mitigation, and the Aerial Design Option LPA as a design element. Lowering the alignment of South Spruce Avenue would eliminate the need for retaining walls, thereby reducing construction impacts on the Francisco Terrace Play Lot (see Response 19.16). In addition, depressing the street would result in a slight reduction of wetlands acreage impacted during both construction and operations. During deliberations of the merits of this design refinement, no new significant impacts were identified.

The revised BART alignment in the vicinity of South Spruce Avenue is contained in Volume IV, Design Appendix, of the FEIR/FEIS. A brief analysis for each environmental issue follows:

**Transportation.** Lowering South Spruce Avenue would not affect transportation because no intersections or roadways would be crossed or disrupted and the speed limit would remain at 40 mph.

**Land Use.** No displacement, neighborhood cohesion, or socio-economic impacts would occur as a result of lowering South Spruce Avenue.

**Visual Quality.** Lowering the alignment of South Spruce Avenue would eliminate the need for retaining walls required for an elevated roadway, thus the visual setting would not be significantly altered.

**Cultural Resources.** No new land would be disrupted by lowering South Spruce Avenue thus no unknown cultural resources would be disturbed.

**Community Services.** Police, fire, and emergency services would not be affected by lowering the alignment of South Spruce Avenue. Water and wastewater services would not be disrupted.

**Geology.** No new sub-surface structures would be created. The area is already disturbed by South Spruce Avenue and any loose, unconsolidated soils would be replaced by compacted soils for construction of BART and South Spruce Avenue.

**Biology.** Depressing the street would result in a slight reduction of wetlands acreage impacted during operations.

**Hydrology.** Flood control capacity would not be impacted. The current grade of South Spruce Avenue, the flow lines of the gravity sewers, and open waterways would be maintained.

**Noise and Vibration.** No new noise or vibration would occur as a result of lowering the alignment of South Spruce Avenue.

**Air Quality.** No new air quality impacts would occur as a result of lowering the alignment of South Spruce Avenue.

**Public Health.** The existence of potentially hazardous materials would be identified and removed prior to construction of the BART alignment so that lowering South Spruce Avenue would not increase the risk of exposure to hazardous materials.

**Energy.** No energy would be required as a result of lowering the alignment of South Spruce Avenue.

**Construction.** Construction impacts would be the same as identified in the DEIR/Technical Appendix with the exception land use and visual quality. Access to businesses would not be disrupted along South Spruce Avenue and since no retaining wall would be constructed, visual impacts would be reduced. Depressing the street would also result in a slight reduction of wetlands acreage impacted during construction.

19.9.

Spillover parking into adjacent neighborhoods is likely, creating the need for a parking permit program. The City is concerned that such a program would have a significant impact on police services, and possibly require adding a third Parking Enforcement Officer. BART is not mitigating this impact, but rather shifting the problem to the City, and this is not discussed.

- Response.** Please refer to Response 14.25 for a discussion of BART measures to prevent the occurrence of spillover parking in the first instance. Nonetheless, BART will assist in determining the occurrence of spillover parking and the need for a Residential Permit Parking Program. Zones with restricted time for parking in residential neighborhoods and Residential Permit Parking Programs have been established in several areas in the vicinity of BART stations. These measures will need to be administered by the local community because such communities, and not BART, have the applicable authority to institute and administer such measures. Revenues from parking programs have been used in communities to cover the costs of administering the program and associated court costs.
- 19.10. The DEIR identifies that airport passengers may use lots along the BART Extension to access the airport. It further states that the related additional traffic and parking demand has not been quantified in the parking estimates and lists the impact as significant....The BART system must provide parking at the stations appropriate to the increased demand associated with the airport.
- Response.** Please refer to Responses 10.10 for a discussion of the potential for the one-day air passenger to park at certain BART stations rather than park in airport lots and BART's strategy for prevention of inappropriate use of BART parking areas.
- 19.11. The level of detail provided regarding noise and vibration impacts relies too heavily on future studies to determine appropriate mitigation without ensuring specific noise or vibration levels...At a minimum, since the draft EIR does not commit to specific noise mitigation measures, it must commit to specific sound and vibration levels for affected receptors.
- Response.** It is not feasible to perform more detailed analysis of noise and vibration until a specific alignment has been chosen. The DEIR/SDEIS analysis of noise and vibration impacts relied on currently available data and was sufficiently detailed to identify significant impacts and mitigation measures. During preliminary design, it is standard practice to refine the predictions of wayside noise and vibration with more site-specific data, especially with regard to local soil effects. The DEIR/Technical Appendix commits to certain types of noise and vibration mitigation and specific noise and vibration levels consistent with the limits indicated in BART's system design criteria (see pages 3.9-11 through 3.9-16). The design of specific mitigation during preliminary design for the project would be based on the BART system design criteria.
- 19.12. Treasure Island Trailer Court - the discussion is very weak about how the construction impacts and long term noise and/or vibration impacts will be addressed....No discussion relative to the height and impact of sound walls is provided. While approximately 40 trailers are shown within 20 feet of the alignment, no discussion is included as to whether they can mitigate the vibration impacts to these units.
- Response.** Treasure Island Trailer Court is in the Sunshine Gardens neighborhood. For Alternative III (Base Case), the projected mitigation of airborne noise from trains is a 10-foot high sound wall (see DEIR/Technical Appendix page 3.9-40). Vibration impacts not only to the first row of mobile homes, but to all of the mobile homes at Treasure Island Trailer Court would be mitigated to an insignificant level by one or more of the measures indicated. Please refer to Response 19.106 for discussion of the subway alignment adjacent to Treasure Island Trailer Court under the 1992 LPA, Alternatives IV, V, VI and their design options, and the Aerial Design Option LPA. The actual method of construction has yet to be determined. As indicated in the text, pre-drilled piles or use of a hydraulic pile driver would prevent significant vibration impacts.
- 19.13. SSF Boys and Girls Club...is barely discussed in the document. No mention is made of the impact of the loss of parking and disruption to operations during construction. Further, no discussion is included as to whether, once the project is completed, vehicle access from Orange Avenue and parking will be available for the Club....No discussion is included as to the potential noise and vibration impacts which are anticipated given the proximity to the track line.

**Response.** Please refer to Response 34.3 for a discussion of loss of parking due to construction. Please refer to Response 19.104 for discussion of noise and vibration impacts.

- 19.14. Town of Baden and Mayfair Village....It is unclear as to whether consideration has been given to outdoor areas as well as the indoor area. If outdoor space were included in the analysis, the distances from track to property and the associated noise levels would be substantially different....Additionally, because the BART subway line transitions to a retained cut before it reaches South Spruce, portions of Mayfair Village will require sound walls to attenuate noise.

**Response.** Outdoor spaces of residential property are reflected in the noise analysis where they would normally be used as recreational areas by the residents (i.e., typically backyards). The analysis generally considers the closest sensitive building, which is where the criterion applies. For residences with backyards close to the alignment, the unmitigated noise levels for portions of yards closer to exposed BART alignment segments would be somewhat higher than at the residence. However, for these situations, mitigation is usually necessary and there should be no noticeable difference in the mitigated noise levels at different points in the yard because of the distances involved (e.g., less than 50 feet) and the effectiveness of the sound wall. In the 1992 LPA, Alternatives IV, V, VI and their design options, and the Aerial Design Option LPA the BART alignment is subway to South Spruce Avenue adjacent to portions of Mayfair Village and therefore would not require a sound barrier. A sound barrier would be required for Alternative III as is already indicated on page 3.9-39 of the DEIR/Technical Appendix.

- 19.15. Although not discussed in the EIR, the proposed South Spruce overcrossing would cut off access to a structure containing at least two businesses located at 301 South Spruce, and would probably cut off access to an adjacent vacant parcel.

**Response.** Under design refinements to the Aerial Design Option LPA, South Spruce Avenue would not be raised, and access would be maintained. Under the other alternatives, South Spruce Avenue would be elevated, but it appears that access can be maintained to all of the businesses near the South Spruce Avenue overcrossing. If at a later stage in the design this is no longer the case, then BART may have to acquire and relocate any businesses whose access will be eliminated. This is discussed in the DEIR/Technical Appendix on pages 3.13-58, 60, 61, and 64.

- 19.16. The document states that there will be no significant impact to the Francisco Terrace Play Lot...under any of the alternatives. If South Spruce is raised an additional 8 1/2 feet, as proposed, retaining walls will be required which will seriously impact this narrow park, by severely isolating it from view and possibly creating an unsafe play area. However, if the BART line were depressed further at this location, impacts would be reduced.

**Response.** Under the 1992 LPA, Alternative III, Alternative IV, Alternative V and its design options, and Alternative VI, South Spruce Avenue would be raised approximately 13 feet above its current profile at the CalTrain tracks. This street would remain at about its present elevation at the western edge of the play lot, but at the eastern edge of the park, nearer to the tracks, the roadway would be raised approximately 10 feet above the play lot. A retaining wall would be constructed along the park's southern frontage to support the roadway grade, requiring the use of Francisco Terrace Play Lot for approximately six months during construction. Public access to the park would be prohibited during the construction period, resulting in a "take" of the play lot during this period pursuant to Section 4(f) of the Department of Transportation Act of 1966.

BART would restore Francisco Terrace Play Lot to its current condition at the end of the construction period, so that there would be no permanent adverse physical impacts. The terms of the restoration of the park would be specified in a Memorandum of Agreement between BART and the City of South San Francisco Department of Parks, Recreation, and Community Development.

To acknowledge the temporary take of Francisco Terrace Play Lot described above, the DEIR/Technical Appendix is revised as follows on page 5-2, paragraph three:

Based on the above definitions and considerations regarding use, a direct impact and/or a constructive use would occur at six of the parks located in the project corridor with one or more of the alternatives: Bayshore Circle Park, Francisco Terrace Play Lot, Herman Tot Lot, 7th and Walnut Park, Posy Park, Marino Vista Park, and Lion's Field Park. Three Two other parks were evaluated for proximity impacts, but would not be "used" according to Section 4(f). Table 5-1 summarizes potential impacts to all nine eight impacted parks by alternative.

(As noted in Responses 42.3, Bayshore Circle Park is no longer being considered as potential laydown area, so that a direct impact and/or a constructive use of this resource would not occur.)

Table 5-1 is revised as shown on the following page. (This table is also revised to reflect changes indicated in Response 42.3 regarding Bayshore Circle Park.)

The following text is added on page 5-2 of the DEIR/Technical Appendix under the heading "Parklands with Direct Impacts or Constructive Use."

#### **Francisco Terrace Play Lot**

**Description.** This 0.23-acre park is a small playground, located at South Spruce and Huntington Avenues in the Francisco Terrace neighborhood. It is owned by the City of South San Francisco (Figure 5-2).

- **Clauses Affecting Ownership.** None.
- **Facilities.** A half basketball court and a playground with swings and climbing equipment geared for small children.
- **Planned Additional Facilities.** None.
- **Access.** Pedestrian access is from Huntington Avenue. There is no vehicle access to this park.
- **Usage.** No exact figures are available, but city staff estimate that usage is low, with approximately 20 visitors per day. The park is visited by children using the play equipment accompanied by adults and teenagers playing basketball.
- **Relationship to Other Area Parks.** There are no other tot lots within this immediate neighborhood. The closest similar parks are Avalon and Bayshore Circle parks, 0.6 and 0.8 miles away, respectively.
- **Unusual Characteristics.** None.

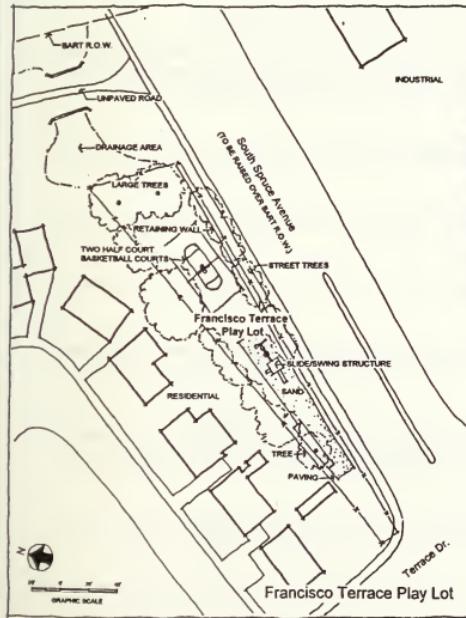
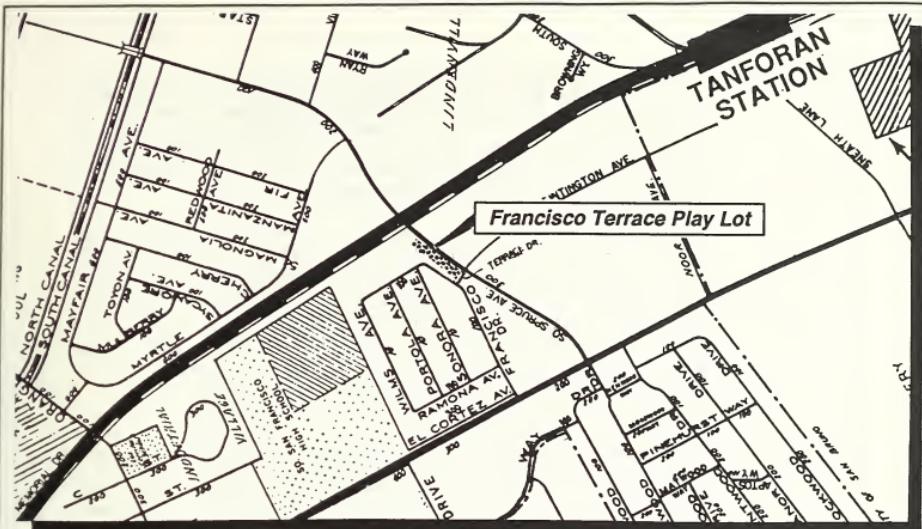
**Impacts.** The proposed project and Alternatives III, IV, V and its design options, and Alternative VI would have a direct effect on the play lot. Under each of these designs, the alignment would pass under South Spruce Avenue in subway configuration, emerging at grade south of the roadway. To accommodate the ascending BART tracks, South Spruce Avenue would be raised approximately 13 feet above its current profile at the CalTrain tracks. This street would remain at about its present elevation at the western edge of the Francisco Terrace Play Lot, but at the eastern edge of the park, nearer to the

**Table 5-1**  
**Parkland Impacts by Project Alternative**

Proposed Project	I-380 Least-Cost Design Option	Alternative I No Build	Alternative II TSM	Alternative III Base Case	Alternative IV Airport Aerial East of 101	Alternative V Minimum Length Subway	Design Option V-A	Design Option V-B Millbrae Ave. Subway to San Bruno <sup>1</sup>	Design Option V-C Min. Length Subway to Airport GTC <sup>1</sup>	Design Option V-D Subway to International Terminal
<b>Parklands with Potential Direct Impacts or Constructive Use</b>										
Francisco Terrace	PCT	PCT	NA	NA	PCT	PCT	PCT	PCT	PCT	PCT
Bayshore Corte	NA	NA	NA	NA	NA	NA	NA	NA	NA	PC
Herman Tot Lot	T	PC	NA	NA	NA	NA	NA	NA	NA	NA
7th & Walnut	T	T	NA	NA	NA	NA	NA	NA	NA	NA
Posy Park	NA	NA	NA	NA	T	NA	T <sup>1</sup>	T <sup>1</sup>	T <sup>1</sup>	NA
Marin Vista	PC	PC	NA	NA	PC	T	T	NA	NA	NA
Lion's Field	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Parklands Impacted but Not Used</b>										
Orange Memorial	NA	NA	NA	NA	PC	NA	NA	NA	NA	NA
7th Avenue	PC	PC	NA	NA	NA	NA	NA	NA	NA	T <sup>2</sup>

NA Not applicable  
PCT Evaluated for potential constructive use, but none identified  
T Take of land

- 1) With Downtown San Bruno Station Option only.
- 2) With San Bruno tunnel portal contractor laydown Option 3.



tracks, the roadway would be raised approximately 10 feet. A retaining wall would be constructed along the park's southern frontage to support the roadway grade, requiring the use of Francisco Terrace Play Lot for approximately six months during construction. During this time, public access to the park would be prohibited. Although the play lot would be fully restored subsequent to the construction period, a "take" of the park during this period pursuant to Section 4(f) would nonetheless occur.

Under all of the alternatives listed above except Alternative III, the BART tracks would be located 150 feet west of the park approximately in subway, although the alignments would transition to at-grade immediately south of the roadway, about 200 feet from the play lot. Under Alternative III, the alignment due east of the play lot would be at grade. Thus, BART train operations may generate noise effects on the play lot, adding to the ambient noise from adjoining streets and SFIA, which is 1-1/4 miles to the east. Visual effects would occur in the park due to reconstruction of South Spruce Avenue, which would be raised above grade on the south side of the park. This visual impact would not affect the use or function of the park. No vibration impacts would occur to the play lot.

**Planning and Mitigation Measures.** Under each of the alternatives listed above, the BART alignment could be further depressed as it passes under South Spruce Avenue to avoid the need to raise the roadway and construct a retaining wall. Use of Francisco Terrace Play Lot would therefore not occur. Depressing the BART alignment under South Spruce Avenue would have the added benefit of further diminishing any changes to the play lot's ambient noise environment and avoiding visual impacts.

**Coordination.** The City of South San Francisco Department of Parks, Recreation, and Community Development has been consulted regarding impacts to Francisco Terrace Play Lot, avoidance alternatives, and measures to minimize harm. Director Nagel agreed with the presentation of potential impacts and mitigation measures in this Figure 5-2 (to be prepared)

DEIR/Technical Appendix for Francisco Terrace Play Lot (personal communication with Barry Nagel, March 21, 1996).

The Francisco Terrace Play Lot figure replaces Figure 5-2 on page 5-5 of the DEIR/Technical Appendix, which is deleted as described in Response 42.3.

The first two sentences of the first full paragraph on page 5-18 of the DEIR/Technical Appendix are revised as follows:

~~Three~~ Two other parklands are located in the project corridor and would experience proximity impacts. These are Orange Memorial Park, ~~Francisco Terrace Play Lot~~, and 7th Avenue Park.

To acknowledge the temporary loss of Francisco Terrace Play Lot in the Town of Baden neighborhood, Table 7-2, Summary of Significant Unmitigable Construction Impacts on Neighborhoods, in the DEIR/Technical Appendix is revised as follows:

In the row titled "Town of Baden," add the phrase "loss of park" for all alternatives except the TSM Alternative II.

In addition, the last sentence of the third full paragraph on page 7-14 of the DEIR/Technical Appendix is revised as follows:

Construction impacts may include disruption of local circulation (all build alternatives), disruption to businesses (proposed project, I-380 Least-Cost Design Option and Alternative III), and noise/vibration impacts (all build alternatives), and temporary loss of parkland (all build alternatives).

- 19.17. The EIR does not identify how the right-of-way [in] Linear Park will be improved above the subway as part of the project....If the right-of-way is not improved it will still attract informal use as a play space and pedestrian path. Such unimproved space would create an unsafe environment....

**Response.** After construction is completed, the area above the subway box is typically restored to its existing state before construction. If local jurisdictions wish to convert this area for parkland, BART will cooperate with the municipalities. It would be the responsibility of the local jurisdictions to construct and maintain any proposed improvements such as a linear park.

BART has considered how some right-of-way with subsurface track can be further utilized and does not plan to preclude use of this right-of-way for some other uses (bicycles as transportation-related use). Some property above subsurface BART alignment, particularly in South San Francisco, is being considered for inclusion into a larger bike route in San Mateo County. BART is working jointly with peninsula communities to facilitate and contribute to this route, as feasible. See Volume V, Technical Appendix in this FEIR/FEIS for further discussion of integrating BART easements into a bike route.

- 19.18. The City is...very concerned about the extent of the "temporary construction easements" which are shown on the design drawings. The actual use of these areas is not described but in many cases the easement completely envelops occupied businesses, residences and parkland.

**Response.** Two types of temporary construction easements are shown without distinction in the Design Appendix drawings:

1. Sub-surface easements which would allow the contractor to support the excavation areas with tie-backs or soil nails. This temporary use would have no impact on the current surface use of the property.
2. Surface easements which would allow the contractor to gain access, operate equipment, and store materials on the property during the construction period.

The plan and profile drawings completed during the FEIS/FEIR and preliminary engineering and included in Volume IV of this document distinguish the two types of temporary construction easements.

- 19.19. The City has reviewed the hydrology section of the BART DEIR and fears that the project will worsen existing conditions [in] Colma Creek.

**Response.** In response to comments and additional technical discussion with the affected cities and agencies, BART proposes to implement Alternative II of the Reimer Associates Colma Creek Validation Study dated February 16, 1995 as described in Response 15.4. Implementation of Alternative II will prevent the worsening of the existing conditions in Colma Creek.

- 19.20. The BART/Colma Creek Realignment schemes should ultimately be incorporated into the BART Project. In the alternative, if the Study's realignment schemes prove unfeasible, the BART Plan should at a minimum be designed to allow Colma Creek to flow above BART facilities.

**Response.** Please refer to Response 15.4 for further details on Colma Creek.

19.21. The sources of the project funding...should clarify current discussions with BART staff which indicate the funding scenario does not entail a financial commitment from the City of South San Francisco.

**Response.** Although not required for the purposes of NEPA or CEQA, Chapter 6 of the DEIR/SDEIS provides the public and decision makers with estimated capital and operations and maintenance costs associated with the Aerial Design Option LPA, including all design features described in detail in the DEIR/SDEIS. Chapter 6 also identifies the sources of funding for the Aerial Design Option LPA. If local cities, however, propose project enhancements to the Aerial Design Option LPA, in addition to the design features described in the FRDEIR/S#2DEIS, they would be responsible for securing the necessary additional funding for these enhancements.

19.22. Our understanding is that the funding is to be provided in increments, leading to a concern over whether there will be sufficient funds to complete the project. Have contingency plans been developed to address this possibility? The City is very concerned that the South San Francisco station not become an end of the line station due to the severe impacts upon parking, traffic, circulation, etc., which would result.

**Response.** Federal funds will be provided to the project in increments, with the amount determined in the Congress annually. Other funds may also be provided over a period of time, thus necessitating financing the project, or selling bonds to cover the gap between need for construction capital and receipt of funds. However, it is not anticipated that this would not result in the project being opened in sections, with the South San Francisco Station, for instance, being the end-of-line station for a period. Further analysis would be undertaken to determine additional impacts, if any, of such options..

19.23. The DEIR/SDEIS is an unwieldy document consisting of 14 separate volumes and in excess of 2000 pages of information. The sixty day period allotted for review of all of these documents is insufficient and additional time is needed for a thorough review.

**Response.** The joint federal and State document has been compiled in four volumes, as described on page 1-5 of the DEIR/SDEIS:

- The Executive Summary
- The SDEIS and Summary of DEIR
- The DEIR and Technical Appendix
- The Design Appendix

There are not 14 separate volumes comprising the environmental document, although there are numerous technical appendices which provide support to the document and which have been available to the public upon request.

As explained in the DEIR/SDEIS, the document is the second in a series of documents circulated for public review concerning this project. The first was the AA/DEIS/DEIR. Please see the Historical Overview in Section 1.1 of the DEIR/Technical Appendix for more information on these documents.

Please refer to response 10.2 regarding the length of the public review period.

19.24. South San Francisco requests that the Hickey Station be renamed South San Francisco Station.

**Response.** BART acknowledges this request and will rename the Hickey Station as the South San Francisco Station during the preliminary engineering phase of the project.

- 19.25. The language describing Alternative III (Base Case), page 2-33, page 2-109, should be revised to clarify that the 1992 LPA Resolutions recommend that if financing cannot be secured for the LPA, that the Base Case "or another lower cost option for which funding is secured" becomes the new LPA.

**Response.** The text of the DEIR/Technical Appendix is modified to clarify the 1992 LPA resolutions. Page 2-33, the first full sentence at the top of the page is revised as follows:

~~The LPA resolutions adopted by BART, SamTrans and MTC recommended that in the Spring of 1992 recommend that if financing cannot be secured for the LPA, that the Base Case or another lower cost option for which funding is secured becomes the new LPA. This alternative becomes the LPA if local funding to build the proposed project cannot be secured.~~

- 19.26. Alternative IV, Route Description, page 2-64 - No explanation is given as to why the vertical alignment for this alternative through South San Francisco is different from all other alternatives. This alignment causes the emergency ventilation building to rise approximately 15 feet higher than other alternatives, but no explanation is given.

**Response.** Alternative IV and the LPA had the same profile through South San Francisco to the north end of Tanforan Station, as shown on page 11 of the Design Appendix. For both Alternatives, the ventilation building at engineering station 266+00 was planned to project above ground level approximately 15 feet. In response to comments from South San Francisco, as a design refinement, the BART profile would be lowered at South Spruce Avenue to maintain the existing grade of the roadway. This would lower the profile of the ventilation building.

- 19.27. It is unclear what the finished product would look like. How is a cut-and-cover subway left once construction is completed? Will free access be provided across the line once completed?....Would a linear park be consistent with BART policies for use above the subway line?

**Response.** Once the cut-and-cover subway construction is completed, the surface area would be returned to its natural state of native grasses and other plant types found in the immediate area. The only exceptions to returning the right-of-way to its original conditions are at locations where access and ventilation shafts project above grade, approximately at 3,000-foot intervals. Free access would be provided across the right-of-way. It is feasible to develop some portion of a bike path or some other facility on the right-of-way. BART is working with local communities to facilitate use of BART right-of-way for bike path development. Final routes, local permits and street access, long-term operations, and maintenance issues have not yet been determined. Please refer to Response 146.1 for further discussion on the proposed conceptual bike path.

- 19.28. Traffic conditions reported in the DEIR for existing and future scenarios were compared to conditions reported in the BART Station Site Traffic Study, prepared by the City of South San Francisco in 1991 (copy attached). Conditions reported in the DEIR are almost uniformly better than conditions reported by the South San Francisco study.

**Response.** Please refer to Response 19.4 for a discussion of comparisons between traffic conditions reported in South San Francisco's study of 1991 and those in the DEIR/SDEIS.

- 19.29. The six locations shown below were not addressed in the DEIR for Alternative VI, but would be impacted by project traffic: Hillside/Chestnut; El Camino Real/Mission; El Camino Real/Arroyo; Hillside/Evergreen; Hickey/Junipero Serra; [and] Hickey/Hilton. The traffic analysis for Alternative VI must assess impacts at these locations....

**Response.** Comments were received on the 1992 BART extension AA/DEIR/DEIS requesting more intersections to be analyzed than the 17 intersections included in that study. Based on public comments received on other suggested intersections as well as using professional judgment, a total of 97 intersections were chosen for analysis as potentially having a significant impact by BART-related traffic, including the intersection of El Camino Real/Arroyo. Please refer to Response 19.38 as it relates to the intersections of Hillside/Chestnut, Hillside/Evergreen, and Hickey/Hilton. Traffic at the intersection of El Camino Real/Mission would decrease under the BART build alternatives, as compared to the No Build BART Alternative, because with the BART build alternatives traffic would no longer go through this intersection to access the Colma Station, but rather, would go to the Hickey BART Station.

Analysis of the intersection of Hickey/Junipero Serra indicated that it would operate at acceptable levels of service under the Alternative VI LPA and the Aerial Design Option LPA in 2010 during the P.M. peak hour. This analysis year and time period represent the largest volumes through this intersection of all years and of either time peak hour for the BART build alternatives.

- 19.30. There is a very large discrepancy between trips that appear in the intersection analyses in Appendix A, and the calculated vehicle trip generation...

**Response.** Please refer to Response 17.13 for a discussion on the differences between the intersection turning movements at the BART station entrances/exits and the Appendix B tables on BART station entries and exits. Additional information on Appendix B Table B-40 is presented in Responses 10.12 and 17.12.

- 19.31. Traffic volume on some intersection approaches near the Hickey Station site is higher under the No Build scenario than for Alternative VI in the Year 2010. This is counter intuitive...[when considering]: southbound volume on El Camino Real/Hickey Boulevard [and] northbound and southbound volume on Mission Road/Evergreen Drive. Traffic volume between adjacent intersections near Hickey station do not "balance" at all segments, i.e. departure volume from one intersection do not approximate the approach volume to the adjacent intersection....The following are examples of balancing inconsistencies:

- Southbound on Mission Road between the Hickey Station kiss-and-ride entrance and Hickey BART Station kiss and ride exit;
- Eastbound on Hickey Extension between BART Station exit and Mission Road; [and]
- Westbound on New Street between station bus entrance and parking garage entrance...

**Response.** The differences in turning volumes between these pairs of intersections are not significant in assessing the traffic impacts and represent slight differences due to hand adjustment required to accurately distribute the traffic volumes. The first segment on southbound Mission Road has a difference of 60 vehicles in the P.M. peak hour, the second segment on eastbound Hickey Extension has a difference of 29 vehicles and the third segment on the new street has a difference of 32 vehicles. Please also refer to Response 19.5 for a discussion of traffic volumes under the BART build alternatives compared to the No Build Alternative.

- 19.32. BART must explain why traffic volume would increase...westbound on [Hickey Extension between the station exit and El Camino Real and along El Camino Real between Hickey Extension and New Street] during both the A.M. and P.M. peak hours, and decrease eastbound during both the A.M. and P.M. peak hours.

**Response.** A centroid connector, a traffic model link that connects vehicle trips between a traffic analysis zone and the roadway network, exists on the Hickey Boulevard Extension segment between El Camino Real and the Hickey Station Exit. This centroid connector represents the Macys' warehouse driveway assumed to have access onto the Hickey Boulevard Extension and adds vehicles traveling westbound on Hickey Avenue Extension toward El Camino Real while

decreases vehicles to traveling eastbound on Hickey Avenue Extension toward the Hickey Station Exit.

The traffic model development focused on the critical component of the street network, the intersections, and not on the roadway lengths between intersections. Minor inconsistencies in traffic volumes between intersections are possible. For example, the inconsistency in traffic volumes for street segments of El Camino Real between the New Street within the Hickey Station and the Hickey Boulevard Extension may vary from 1.7 to 5.7 percent of the total during the peak hours under Alternative VI in 2010.

- 19.33. Calculations show no vehicles entering the bus entrance on the internal "New" Street during the P.M. peak hour. There should be.

**Response.** The bus trips entering the station internal center roadway from the New Street were not entered but the number of buses entering this roadway during either A.M. or P.M. peak hour would not be enough to affect significantly the level of service that is LOS A in all three analysis years under all BART build alternatives, excluding the Base Case Alternative, which does not include the Hickey Station.

- 19.34. Ridership, traffic, and parking forecasts exclude potential BART demand from air passengers, even though the MTC model predicts that 1,700 San Mateo County residents would use transit to SFIA in 2010 (Appendix Table B-37). This raises two issues: (1) is it an appropriate policy, and (2) is it a reasonable expectation?

**Response.** Please refer to Response 10.10 for a discussion on prevention of parking by air passengers at stations along the BART extension.

- 19.35. Mitigation Measure 6.2 recommends fare surcharges for trips on BART between the Extension stations and SFIA. This would affect all County residents wanting to take BART to SFIA whether they park at a station or not, and therefore is...unacceptable. BART must develop a cooperative, feasible plan for limiting air passenger parking, not patronage, along the Extension.

**Response.** Please refer to Response 10.10 for a discussion on airport passenger parking at transit stations and pricing surcharges.

- 19.36. If the Mission-Hillside extension is not constructed, traffic conditions with the BART station would reach unacceptable levels along Chestnut Avenue, Grand Avenue, and Evergreen Road....It is therefore critical that Hickey Boulevard be constructed between Mission and Hillside, and it should be identified as a necessary mitigation measure.

**Response.** Please refer to Response 19.7 for a discussion of the Hickey Extension between Mission Road and Hillside Boulevard.

- 19.37. The base case alternative indicates that the Oak Avenue extension to El Camino Real is necessary for the Chestnut station circulation and access to function properly, yet no analysis of the extension and the intersection at El Camino Real is included in the report....The City believes that Oak Avenue should be improved to city standards and be extended to El Camino Real under all proposed alternatives.

**Response.** The Oak Avenue Extension to El Camino Real is not required to mitigate any significant impacts under the BART build alternatives that include the Hickey Station. The Hickey Extension from El Camino Real to Mission Road would be built with the Hickey Station. Virtually no BART-related vehicles would use Oak Avenue with the Hickey Station. Please refer to Response 19.7 for further discussion of traffic impacts with the Hickey Boulevard Extension.

19.38. The following intersections would be impacted by BART to such an extent that mitigation measures should be considered: Spruce and Huntington, El Camino and Spruce, Chestnut and El Camino/Antoinette Lane/Mission Road, Westborough and West Orange, Westborough and Junipero Serra, El Camino and Arroyo, El Camino and Kaiser Hospital, El Camino and Hickey, Mission Road and Evergreen, Evergreen and Hillside Boulevard, Hillside Boulevard and Chestnut Avenue, Hilton Avenue and Hickey Boulevard, and Arlington Drive and El Camino Real.

**Response.** Five of the intersections listed were not included in the report on the analysis of traffic impacts in the DEIR/SDEIS, including the intersections El Camino Real/Kaiser Hospital, Evergreen/Hillside, Hillside/Chestnut, Hilton/Hickey, and El Camino Real/Arlington. BART-related traffic would add insignificant volumes to these intersections as indicated by the trips assignment results of the sub area traffic model. For example, as discussed in Response 15.1, 60 eastbound BART-related vehicles would be added on Hickey Boulevard and would be reduced by over 100 vehicles on Hickey Boulevard during the A.M. peak hour in 2010. This change would not significantly decrease the level of service at the Hilton/Hickey intersection. The remaining intersections were included in the traffic analysis in the DEIR/SDEIS and mitigation measures were considered as necessary.

19.39. There is no discussion of the impact that the proposed Oak Avenue extension (as shown on Figure 2, page 107, of the design appendix), to be constructed with the Chestnut Avenue Station, will have on El Camino Real and Mission Road.

**Response.** The Oak Avenue Extension from Mission Road to El Camino Real to be constructed with the Chestnut Station under Alternative III was analyzed in the DEIR/SDEIS. The results of the level of service analysis are in Appendix C of the DEIR/Technical Appendix, including Table C-19, Alternative III Intersection Level of Service. The intersection of El Camino Real/Arroyo (intersection #21) includes the Oak Avenue Extension under Alternative III and operates at acceptable levels of service, as does the intersection of Mission/Oak, which also includes the Oak Avenue Extension in the calculations of level of service. Traffic volumes at El Camino Real/Mission Road intersection would decrease with any of the BART build alternatives, including the Base Case Alternative with the Chestnut Station, compared to the No Build Alternative. A significant percentage of the traffic destined to or coming from the Colma Station that would travel through the El Camino Real/Mission Road intersection would be diverted to the station in South San Francisco.

19.40. The vertical curve design speed for the proposed South Spruce Avenue overpass is shown as 25 mph on Figure 5, page 100, of the design appendix....The BART subway structure must be lowered as required to permit a 45 mph design speed for the overpass.

**Response.** Please refer to Response 19.8 for a discussion of design speed at the South Spruce overpass, which also applies to this question.

19.41. Pages 3.1, 136 & 137 - The report determines that degradation of two or more service levels is "insignificant and warranting no mitigation" based on the fact that certain intersections are "not in residential areas." All intersections with significant degradation of service levels regardless of whether in residential areas or not should be analyzed with mitigation proposed.

**Response.** The determination that a decrease of two or more levels of service in a residential area, even though the level of service is better than LOS E, constitutes a significant impact and is unique to this traffic study. This "extraordinary" consideration was made to accommodate the sensitivity of residents to traffic impacts in a residential area. To apply the same considerations, however, in commercial or industrial areas in which the sensitivities of residents would not be experienced would not be appropriate.

19.42. Page 3.1, 138 [Impact] 8 [of the DEIR/Technical Appendix] - The mitigation measures section indicates "no measures are available to mitigate impacts to the intersection of Junipero Serra" and

Westborough and impact is stated to be significant and unavoidable. More explanation of this position is necessary as this is one of the most critical intersections in our city.

**Response.** A significant cumulative impact occurs at the intersection of Junipero Serra/Westborough under Alternative III in analysis year 2010 only. The level of service at this intersection under the No Build Alternative is LOS E in 2010 and the volume-to-capacity ratio increases by three percent under Alternative III compared to the No Build Alternative in 2010. Further investigation indicates that an added lane on the south leg of the intersection to create a northbound to westbound triple left turn lane would mitigate this impact but would require the taking of the golf course property. The possible "taking" of the golf course property for mitigation may be infeasible due to the costs of acquisition or possible adverse impacts from the taking. Nonetheless, if the City were to pursue such a taking, BART would be committed to covering its fair share of the mitigation costs.

- 19.43. Mitigation is proposed for restriping Chestnut (northbound) and Grand Avenue to provide better access to either BART station location in SSF (page 3.1-125). However, it does not appear that analysis was done to determine the negative impacts that may result from such restriping on traffic wishing to go north on Chestnut or east on Grand Avenue.

**Response.** Proposed improvements to the Chestnut/Grand intersection include changes in signal phasing as well as restriping under the 1992 LPA and Alternatives IV and V. The estimation of level of service indicated improvements for the intersection as a whole. The loss of free right turns from the northbound movement on Chestnut Avenue would be fully compensated by reductions in delay for all other turning movements.

- 19.44. The estimated parking demand and supply requirement are underestimated and invalid. BART must add air passenger demand to these estimates.

**Response.** Please refer to Response 10.10 for a discussion of the potential for the one-day air passenger to park at certain BART stations rather than park in airport lots, and BART's strategy for prevention.

- 19.45. The parking demand of 1,130 spaces shown on Table 3.1-95 cannot be calculated with the station ridership and auto-access numbers shown in Table B-40....BART staff claim that the error in Table B-40 was a transcription error....Given the differences in trip generation cited and its potential impact on conditions in South San Francisco, BART must determine with certainty whether or not the error was applied to the traffic and transit operating analyses.

**Response.** Please refer to Response 17.12 regarding parking demand at the Hickey Station compared to Appendix Table B-40 which also applies to this comment. Revised Table B-40 is provided following Response 10.12.

- 19.46. Page 3.1-167. Institution of residential parking permit programs in SSF would have a significant impact on police services....The BART report has displaced this mitigation onto the city rather than adequately assess other potential measures to remedy the situation that should/could be accomplished by BART, nor is any consideration given to BART providing partial funding to the local agency for added parking personnel to handle BART created parking problems.

**Response.** Please refer to Responses 14.25 and 19.9 regarding spillover parking.

- 19.47. Preferred parking programs also impact existing residential areas in that they create difficult situations for non BART related visitors to park in the neighborhoods for social visits, etc.

**Response.** The Residential Permit Parking Program can include passes that would be displayed in visitors' vehicles to notify police that the vehicle should not be ticketed. An alternative to the Residential Permit Parking Program would be to restrict the length of time parking would be permitted during the day to prevent commuters from parking in the neighborhood. Such a measure presumes that local residents have off-street parking during the day while allowing street parking for a specified period of time, such as for four hours.

- 19.48. It appears that an appropriate mitigation measure, should the initial number of parking spaces at South San Francisco stations prove to be inadequate, might be a requirement to expand on-site parking to meet actual demand.

**Response.** The number of parking spaces required to meet the forecasted parking demand at the Hickey or Chestnut Stations was derived from the MTC traffic model and refined by employing a sub-area traffic model of central and northern San Mateo County developed for this study. This model used MTC regional BART patronage projections to derive the number of persons driving to each existing and future BART station in the study area. The parking demand will be highest in 2010 compared to 1998 and 2000, therefore the impact analysis and required mitigation measures were performed for 2010 when the adverse effects from parking demand would be greatest.

The design of the Hickey Station under all of the BART build alternatives except for the Base Case Alternative includes a supply of parking spaces that is above the forecasted demand for 2010. The initial concept design for the Chestnut Station under the Base Case Alternative included fewer parking spaces than would be required according to the forecasted parking demand. Mitigation 4.1 on page 3.1-174 of the DEIR/Technical Appendix would add additional parking to the Chestnut Station design to meet the forecasted parking demand. Such additional parking mitigation is not required with the design of the Hickey Station which has adequate parking. Spillover would be monitored at any South San Francisco BART station and if found to be a problem, mitigation measures, including a Residential Permit Parking Program and restricted parking zones, would be implemented.

- 19.49. SFIA passengers may use lots along the Extension to access the ALRS....This potential additional demand has not been quantified in the parking estimates and lists the impact as significant. Why hasn't this demand been quantified?

**Response.** Please refer to Response 10.10 for a discussion of the potential for the one-day air passenger to park at certain BART stations rather than park in airport lots and BART's strategy for prevention.

- 19.50. Page 3.1-172, Item 2. A residential parking permit program would not mitigate impacts to the County Government Complex located directly across the street from the Chestnut Station. How will spillover parking into this station be controlled?

**Response.** If after monitoring the County Government Complex, a spillover parking problem occurred from the proposed Chestnut BART Station, then a variation of the residential parking permit program would be implemented to mitigate this impact. Employees entitled to park all day at the complex would be issued a permit, while a number of designated spaces would be set aside for visitors (with restrictions on the permitted length of time for parking). BART patrons could not park in the Complex without a permit and could not park in the visitor spaces because the permitted time would be too short to serve their needs. Please also refer to Response 14.38 for a discussion of monitoring and mitigation of spillover parking into local streets.

- 19.51. Page 3.1-185 - The bicycle lane routes and paths section indicates existing bicycle routes on Mission Road and Huntington Avenue in South San Francisco; no such lanes exist.

**Response.** According to the South San Francisco General Plan, both Huntington Avenue and Mission Road are designated as Intra-County bicycle routes. This listing does not imply a separate bicycle lane is provided, only that these roads are designated as bicycle routes.

19.52. Figure 3.1-6 - Reflects all sorts of bicycle facilities in SSF; none of the roadways depicted in the figure have designated bicycle lanes. Only Junipero Serra Boulevard, Westborough extension, Hillside Boulevard and part of Airport Boulevard have a "shy line" or "fog line" which allows enough room on the road shoulder for bicycle travel, but none are designated as bicycle lanes. Gateway Boulevard, which is not depicted, has designated bicycle lanes.

**Response.** Bicycle route information was obtained from local city General Plans and the City/County Association of Governments (CCAG) San Mateo County Bicycle Map. The CCAG information explains, "Although these routes have a well-established history of bicycle use, most are not planned, adopted or maintained as 'bicycle facilities' by any public agency." Nevertheless, their designation as a bicycle route on a public map from a public agency required their inclusion in the DEIR/SDEIS. Gateway Boulevard in the Oyster Point area was not included on the map because it was outside the general area of impacts created by the BART-SFIA Extension.

19.53. Throughout the DEIR/Technical Appendix (such as on page 3.1-191) it is mentioned that between the Hickey Station and Chestnut Avenue, one pedestrian bridge and one informal pedestrian crossing will be eliminated....It is assumed that the "informal crossing" is the path that connects El Camino with Mission Road, via a permanent bridge across Colma Creek....The walkway should not be classified as "informal" as it has been used by the public for over 30 years....

**Response.** These two crossings would be eliminated during construction under all BART build alternatives. The bridge crosses the SPTCo right-of-way, but elimination of this passage way is not classified as a significant impact. The Hickey Station would provide access for pedestrians, also permitting pedestrians to cross between El Camino Real and Mission Road.

19.54. The rail corridor between Chestnut and South Spruce Avenues is heavily traversed by students....The City is concerned that the fencing associated with a retained cut would not serve as an adequate safety device for students and would act as an "attractive nuisance"....

**Response.** The Base Case Alternative is the one BART build alternative that would be in retained cut between Chestnut and South Spruce Avenues. The fencing on the walls for the retained cut portion of BART's alignment would be rigorously inspected and maintained to prevent any intrusions onto the tracks.

19.55. There is also a permanent wooden arch pedestrian bridge over Colma Creek between the North end of Antoinette Lane and Mission Road. However, it would not appear that the BART Project would impact this bridge (or will it?).

**Response.** The BART alignment does not travel between Antoinette Lane and Mission Road but is west of Antoinette Lane and therefore would not affect this wooden arch pedestrian bridge.

19.56. DEIR Summary and Technical Appendix, Chapter 3, does not forecast transit ridership, traffic conditions, or parking needs with a CalTrain downtown San Francisco extension. The 1991 AA/DEIR/DEIS for the BART extension did. BART therefore refers reviewers to that document to identify the relative impact of the downtown extension on BART/transit patronage. This is inappropriate for three reasons:

- Referring the public to a four year-old document to obtain important, relevant information is highly inappropriate because it inhibits a thorough, efficient review for much of the public.
- The CalTrain Extension is regarded by MTC and San Mateo County as a high-priority project, whose market would overlap considerably with that of the BART extension. Therefore, the

transit patronage assessment must clearly show how the downtown extension would affect transit ridership, traffic conditions, parking demand, and costs.

- The nature and alignments of the BART “Build” alternatives and station locations have changed since 1991 (i.e. Chestnut to Hickey). Referring reviewers to the old document would not provide an accurate comparison and should therefore be discouraged.

**Response.** Please refer to Response 11.6 for a discussion of the CalTrain downtown extension.

- 19.57. It would be very useful to provide some graphic display of a feeder bus route network focusing on Hickey Station, and anticipated service schedules....Should the City assume that existing schedules for those routes would continue but that the BART station would become a major service hub? Would service levels be increased?

**Response.** The changes in SamTrans bus routes that were assumed in modeling the transit patronage forecasts were included in the Final Definitions of Alternatives, Task 5, Deliverable 7 published in August 1991 by MTC. This report was part of the AA/DEIS/DEIR, and includes maps of the changes in SamTrans bus routes assumed for estimating transit patronage. Changes in SamTrans service as a result of the Hickey Station are also included in this report. Although this report was done for the AA/DEIS/DEIR, the same assumptions apply to the alternatives in the DEIR/SDEIS except that the bus routes serving the Airport Intermodal Station would be shifted south to serve the Millbrae Intermodal Station under Alternatives IV and V or to service the Millbrae Avenue Station under Alternative VI.

Local feeder buses serving the employment areas in the Oyster Bay area to and from the proposed BART station in South San Francisco were assumed in modeling patronage forecasts. Please refer to Response 14.29 for further discussion of the changes in SamTrans bus service made as part of the modeling assumptions.

- 19.58. Mission Road is not designed as a high-capacity regional route for motor vehicles, and there is significant residential development east of Mission Road and south of the station site. BART and SamTrans must therefore be sensitive to the developed environment when planning new feeder bus services and designing vehicular access to the station.

**Response.** No changes were made to SamTrans bus service on Mission Road as part of the modeling assumptions used to forecast transit patronage. The headways of buses serving Mission Road were assumed to be the same under all alternatives, although the buses would divert into the BART station in South San Francisco under the BART build alternatives.

- 19.59. The ridership table indicates very high patronage for “Attraction” trips in the Base year through 2010....About two-thirds of the transfers to bus are for work trips. These are large numbers, particularly because other than Kaiser Permanente (whose total employment is about 400), there aren’t many large employers nearby; where are these people going?

**Response.** The bus and walk access trips to BART were based on MTC’s mode choice model. The work trips that are shown as attraction trips in the table and use buses to access their employment destinations include employment centers in the Oyster Point region, which contains many jobs and will have bus access from Hickey Station. Hickey Station also provides bus service to downtown South San Francisco, as well as commercial and retail developments along El Camino Real and Serramonte Mall.

- 19.60. Land Use Patterns, page 3.2-14 of the DEIR/Technical Appendix. The description of existing land use patterns should be modified as follows:

"Much of the housing and industrial use in the city was developed between the 1940s and 1960s, and South San Francisco is currently nearly fully developed (built out). A major exception to this trend is the Terrabay development (719 residential units) to be constructed north of Hillside Boulevard. In recent years, there has been substantial redevelopment and intensification of use in the area east of Highway 101, with office buildings, hotels, and biotech development replacing industrial uses. Notable vacant sites in this area include the 60 acre Shearwater commercial property and the 30 acre Koll property along the southern portion of Sierra Point. There are also approximately 60 vacant or underutilized acres in the northwestern section of the city where El Camino Real enters from Colma in close proximity to the proposed BART alignment."

**Response.** In recognition of this comment, the text is amended to more accurately characterize existing land uses, as indicated by the City of South San Francisco. Page 3.2-14, paragraph 3 of the DEIR/Technical Appendix is revised as follows:

Much of the housing and industrial use in the city was developed between the 1940s and 1960s, and South San Francisco is currently nearly fully developed (built out). A major exception to this trend is the Terrabay development (719 residential units) currently under construction to be constructed north of Hillside Boulevard. In recent years, there has been substantial redevelopment and intensification of use in the Gateway area east of Highway 101, with office buildings, hotels, and biotech development replacing industrial uses. In addition, the proposed development of a 60-acre site at Shearwater, located on the north side of Oyster Point Boulevard, would include a mix of offices, hotel, and residential development. There are several vacant or underutilized sites in the northwestern section of the city where El Camino Real enters from Colma. Notable vacant sites in this area include the 60-acre Shearwater commercial property and the 30-acre Koll property along the southern portion of Sierra Point. There are also approximately 60 vacant or underutilized acres in the northwestern section of the city where El Camino Real enters from Colma in close proximity to the proposed BART alignment.

- 19.61. The surrounding land uses identified for the Chestnut Station fail to identify the Mission Villa Condominiums which abut the site on its northerly border, and the apartment building at 1107 Mission Rd....The station would generate traffic, noise, light, glare, etc. which would significantly impact these residential uses.

**Response.** Three intersections along Mission Road in the immediate vicinity of these two properties were analyzed and no significant impacts were projected in any of the three analysis years under the Base Case Alternative, the only alternative that includes the Chestnut Station. The intersection of Mission/Evergreen, north of these properties, would have LOS C during the A.M. peak hour and LOS B during the P.M. peak hour in the year 2010 under both the No Build and Base Case Alternative. The intersection of Mission/Grand, on the northern edge of the Chestnut Station, would experience LOS B during both the A.M. and P.M. peak hours under the No Build Alternative in 2010 and LOS C during both the A.M. and P.M. peak hours under the Base Case Alternative in 2010. The intersection of Mission/Oak Avenue, south of these two properties, would be signalized and Oak Avenue would be extended to the west under the Base Case Alternative. This intersection would have LOS B during the A.M. peak hour and LOS A during the P.M. peak hour under the No Build Alternative in 2010, LOS A during the A.M. peak hour, and LOS C during the P.M. peak hour under the Base Case Alternative in 2010.

Whereas traffic impacts are not expected to be significant, visual and noise effects are predicted to be significant for the sites identified by the commentor. A discussion of these impacts to the Mission Villa Condominiums and the apartment building at 1107 Mission Road can be found in the DEIR/Technical Appendix on pages 3.3-54 and 3.9-36 through 3.9-40. In particular, the Chestnut Station and associated parking areas are expected to generate light and glare impacts, and the retained cut alignment is projected to result in relatively high airborne noise and groundborne vibration impacts.

19.62. Barrio Fiesta Restaurant, 909 Antoinette Lane, is within approximately 12 feet of the existing tracks, and is shown to be located within the Right-of-Way (Design Appendix pages 8 and 29). If this business is to be displaced, the impact should be discussed. At the very least the construction related impacts to the business should be discussed.

**Response.** As stated on page 3.2-56 of the DEIR/Technical Appendix, the DEIR/SDEIS did not attempt to discuss each individual parcel which might be affected by the various alternatives. Given the number of alternatives under consideration and the early stage of analysis, the approach taken was to identify the impacts, in general, that would happen to properties in any given area of each of the alignments. The Uniform Relocation Act requires that a Final Relocation Plan (FRP) be performed prior to acquisition and relocation of affected properties. An FRP will be performed subsequent to selection of the LPA for inclusion in the FEIR/FEIS. The FRP, included in Volume V, Technical Appendices of this FEIR/FEIS, identifies all properties to be acquired and/or relocated by the LPA, and discusses the actions that will be taken by BART/SamTrans to minimize impacts on the properties and their occupants.

19.63. Impacts to the SSF Boys and Girls Club, 201 W. Orange Avenue, relating to the potential loss of access from Orange Avenue and the loss of parking should be addressed. Can this facility remain in operation during construction? Upon completion of the project, will vehicle access and parking for the Club be available?....As depicted on Figure 3.3-10 [of the DEIR/Technical Appendix], all parking and access to the club would be cut off under the base case alternative, but is not discussed as an impact.

**Response.** The commentor is correct in stating that if the Base Case Alternative were selected, parking and vehicle access to the Club would be eliminated. This occurrence might make it necessary for BART/SamTrans to displace the South San Francisco Boys and Girls Club parking lot. Permanent parking might be provided to the Boys and Girls Club over the parcel which was previously leased from SFWD, or BART/SamTrans would address loss of parking to the Boys and Girls Club in accordance with federal and state relocation laws as applicable to non-profit organizations. Please see Response 19.62 for a discussion of the approach to individual cases of displacement in the environmental documents.

19.64. The proposed South Spruce overcrossing would cut off access to a structure at 301 South Spruce, containing at least two businesses, and to an adjacent parcel (Assessor's Parcel No. 014-184-020). These impacts should be discussed.

**Response.** Please refer to Response 19.15 for a discussion on impacts to adjacent parcels.

19.65. Page 3.2-66, Item 2. The Chestnut station would displace a portion of an automobile storage lot for a nearby auto dealership. This impact should be identified and addressed.

**Response.** To reflect the commentor input, the text is modified to include the taking of some land where cars are currently stored by an auto dealerships. On page 3.2-66, Impact 3 is modified to read as follows:

3. *Land acquisition would be necessary for the proposed Oak Avenue extension, but no displacement would occur including some City and County San Francisco Water Department land which is currently leased to an auto dealership. A small portion of the auto storage lot would be displaced. (I)*

Please refer also to Response 19.116 for discussion of the auto storage lot.

19.66. The proposed Traction Power Substation, as depicted on page 30, Figure 6 of the Design Appendix and as discussed on page 3.3-53, paragraph seven of the DEIR/Technical Appendix, would displace a portion of the playground at Los Cerritos Elementary School. This impact

should be discussed and strong consideration should be given to relocating the substation to avoid this impact.

**Response.** Under the Base Case, a traction power substation was located on a portion of the Los Cerritos school yard, on property leased to the school by SFWD. The proposed site for the traction power substation has since been changed to approximately 250 feet south of South Spruce Avenue, where it is located in all the other BART build alternatives.

- 19.67. Page 3.3-8, paragraph 2 [of the DEIR/Technical Appendix]. Treasure Island Trailer Court has approximately 350 trailers.

**Response.** The DEIR/Technical Appendix is revised on page 3.3-8, paragraph two, sentence one, to correct the number of trailers in the Treasure Island Trailer Court:

At South San Francisco's common boundary with Colma, the Treasure Island Trailer Court, consisting of approximately ~~290~~ 350 mobile homes....

- 19.68. Francisco Tot Lot should be added to the list of sensitive receptors.

**Response.** The DEIR/Technical Appendix is revised on page 3.3-13, to include the following bullet as the fourth one from the end:

- Francisco Terrace Tot Lot - On the north side of South Spruce Avenue between Terrace Drive/Huntington Avenue and the CalTrain tracks.

- 19.69. Page 3.3-28. Significance Criteria. How was the distance of 60 feet from a sensitive receptor arrived at as the criteria for determining a visual impact?

**Response.** Please refer to Response 14.54 for a discussion of significance criteria.

- 19.70. Page 3.3-29 Mitigation 2.1. BART should provide an irrigation system for these trees to ensure survival.

**Response.** For the Town of Colma, the irrigation system provided by the Colma cemeteries for existing trees would provide water to any new vegetation planted by BART. Modifications to the existing system may be necessary depending on locations of new trees relative to irrigation lines. For the City of South San Francisco, which may be the focus of the commentor, survival of replacement trees would be considered in the replacement process.

- 19.71. Page 3.3-30, [Impact] 4. The impacts to the Francisco Terrace Tot Lot should be discussed. The proposal calls for South Spruce Avenue to be raised approximately 10 feet, supported by retaining walls adjacent to the Play Lot, creating a very inhospitable environment....How will this impact be mitigated?

**Response.** Please refer to Response 19.16 for a discussion of impacts to the Francisco Terrace Play Lot. As described in that response, Francisco Terrace Play Lot would be adversely affected during construction of the retaining wall. Further refinement of the project and selection of the Aerial Design Option LPA has eliminated the need to raise South Spruce Avenue by 10 feet. South Spruce Avenue would instead remain at its current elevation adjacent to the play lot.

- 19.72. Page 3.3-32, [Impact] 8. The Hickey Station will be perceived as a visual impact to sensitive receptors (single family residences) along the northerly side of Mission Road directly across the

street from the station even though they are not located within 60 feet (see above comment). This impact should be discussed.

**Response.** The proposed Hickey Station would alter the visual setting along Mission Road. However, based on the significance criteria described on page 3.3-28 of the DEIR/Technical Appendix, impacts of the Hickey Station were determined to be insignificant. The residences along Mission Boulevard would be opposite a surface parking lot and although the station itself would be below grade, two ventilation shafts would extend about 25 feet above grade and may be visible from residences along Mission Boulevard and from homes along Mission Boulevard. Beyond the station, the parking garage would front onto El Camino Real for approximately 110 feet. Based on the significance criteria and the station configuration, the visual impact to sensitive receptors would not be significant.

The parking structure would not be out of scale with the large-scale Kaiser Medical Center or the Macy's warehouse, which dominate the view from the northerly side of Mission Road. The parking structure would interfere with views from Mission Road of the western ridgeline, but this distant view is not considered visually significant.

- 19.73. Page 3.3-35, [Impact] 9. We do not accept the comment that the parking structure as currently configured adjacent to El Camino Real will improve the street facade.

**Response.** Page 3.3-35, Impact 9 of the DEIR/Technical Appendix states that the Hickey Station "may" enhance the streetscape. Certain landscape and architectural design features are accepted among planning and design professionals as being visually pleasing. The fragmental streetscape along Mission Road and El Camino Real with sidewalks on one side and sparse landscaping would be enhanced with landscaping and building facades that would provide uniformity and a sense of enclosure. A sense of enclosure and landscaping are features that create a pedestrian-oriented, well-defined streetscape.

- 19.74. Page 3.3-53, [Impact] 7 [of the DEIR/Technical Appendix]. The proposed traction power substation would be located on an area currently paved and improved as expanded playground for the Los Cerritos Elementary School. If there is flexibility in siting such a facility we would encourage such. Otherwise, it should be noted as an impact to the school facility. The mitigation offered does not appear to correspond to the impact identified.

**Response.** Page 30, Figure 6 of the Design Appendix incorrectly shows that the traction power station would be on paved school property. The traction power substation and train control bungalow would actually be located in the same place as shown for Alternative VI on page 75, Figure 1 of the Design Appendix. These facilities would lie approximately 250 feet south of South Spruce Avenue and west of the alignment between the Zellerbach warehouse and a small commercial building on South Spruce Avenue. The ancillary facilities would be adjacent to a dense grouping of evergreen trees and would be visible from South Spruce Avenue and the Zellerbach loading area and parking lot. In the context of the surrounding industrial setting, the facilities would not affect the visual environment.

Impact 7 on page 3.3-53 of the DEIR/Technical Appendix is revised as follows:

Ancillary facilities proposed for the Base Case Alternative in South San Francisco would be visible along the alignment but would not alter the visual setting and create a sense of encroachment for residences within 60 feet. (S) (I)

The following sentence replaces the existing three paragraphs:

The ancillary facilities would be situated in the same location as described under the proposed project.

19.75. It appears adequate right-of-way exists adjacent to the homes on Myrtle Avenue. Landscape buffers should be reconsidered in this area or further information should be provided as to why it is unfeasible.

**Response.** Adequate right-of-way may exist between the CalTrain tracks and homes on Myrtle Avenue for low bushes. With only 10 feet available for landscaping, trees in this location would be dangerous to BART operations. Falling tree branches and limbs over BART tracks could create an operational hazard.

19.76. Page 3.3-49. The discussion of visual impacts does not address the visual impacts that could result from continuous soundwalls along the alignment which would create a visual barrier dividing the City of South San Francisco.

**Response.** The DEIR/SDEIS does not recommend continuous sound wall through South San Francisco. Under the Alternative VI LPA, BART would be constructed below grade and sound walls would not be necessary because airborne noise levels would be within acceptable levels. An at-grade sound wall is recommended near South Spruce Avenue where the alignment would be at-grade and airborne noise would affect one home on Francisco Drive. A determination to use this mitigation or another measure providing equivalent noise reduction will be made during the preliminary design phase. If this mitigation is chosen, sound wall vegetation could be planted to reduce the sense of encroachment (see, for example, Mitigation Measure 1.4, At-grade Sound Wall, on page 3.9-17 of the DEIR/Technical Appendix).

19.77. Page 3.2-90, [Impact] 1 [of the DEIR/Technical Appendix], South San Francisco Alternative III. A retained cut alignment would impact the cohesion of our community beyond simply psychologically cutting off individuals who use the tracks for random access from one side to the other. It would literally and physically divide the community with a formidable and powerful barrier and image.

**Response.** The retained cut alignment of Alternative III may physically divide the community. Based on the Visual quality significance criteria described on page 3.3-28 of the DEIR/Technical Appendix and the land use significance criteria described on pages 3.2-35, 3.2-55, 3.2-85, impacts related to businesses, displacement, loss of trees, ancillary facilities, and loss of close-up views for sensitive receptors were identified as significant. The retained cut may reinforce the sense of separation currently created by of the San Bruno branch of the SPTCo right-of-way. However, physical and visual connections across the tracks would remain. Informal crossings of the SPTCo right-of-way may be restricted but formal crossings for both pedestrians and vehicles would remain unobstructed. BART trains would run below grade and only the retaining wall and fence would be visible above ground. Impact 8 on page 3.3-53 of the DEIR/Technical Appendix describes the residential areas that would be most affected by the retaining wall. They include the Treasure Island Trailer Court, condominiums on Mission Road, and homes along Myrtle Avenue.

19.78. Page 3.3-49. There is no discussion in the document related to the graffiti problems associated with both retaining walls and sound walls. Mitigation should be included to address this issue including incorporation of security plant materials to discourage persons from attacking or climbing the walls and use of graffiti-resistant paint or wall finishes.

**Response.** Sound walls and retaining walls inside the BART right-of-way are protected by a cyclone fence with a barbed-wire extension. The District has a zero-tolerance philosophy toward graffiti, as ignoring the problem or delaying removal only encourages more graffiti. This philosophy is especially critical inside the right-of-way due to revenue train operation. An important part of the design of system facilities includes graffiti-resistant wall finishes and the application of paint that increases the ease in removing graffiti. When a situation warrants, the BART Police Department monitors graffiti activity through active undercover surveillance and takes appropriate action when warranted.

- Sound walls and retaining walls whose exposure is against public access ways are maintained under a similar program to that described above. BART employees or the public may report incidences of graffiti and a crew is dispatched to remove the graffiti.
- 19.79. Page 3.4-17, [Impact] 6. In reference to the arched, cut-stone bridge, the City has designated the structure as a historic resource. The City desires to work with BART to explore alternatives regarding possible relocation of the structure or a portion of the structure.
- Response.** BART contacted the City of South San Francisco to explore alternatives regarding the cut stone bridge and has developed with the City plans to mitigate adverse effects. Current plans allow for the removal of the bridge for construction and replacement of the visible headwall, under the direction of expert stone masons, in exactly the same location. This would mitigate the adverse effect to this cultural resource and reestablish the visible qualities of the bridge. Historic American Engineering Record (HAER)-level recordation could be conducted as an additional measure.
- 19.80. Page 3.4-25, [Impact] 6. Mitigation should refer to 6.1 rather than 5.1.
- Response.** The text of the DEIR/Technical Appendix is revised on page 3.4-25, Mitigation Measures under Impact 6, sentence 2:
- Mitigation Measure 5+ 6.1, i.e., the Memorandum of Agreement...
- 19.81. Page 3.4-33, item. 2. Mitigation Measure 2.1 should be referenced.
- Response.** The text under "Project-Specific Analysis" should include reference to Mitigation Measure 2.1, Archaeological Testing and Compliance with SHPO Procedures. Page 3.4-33 of the DEIR/Technical Appendix is revised by the addition of the following paragraph under the Impact 2 statement:
- MITIGATION MEASURE. Mitigation Measure 2.1, i.e., archaeological testing and compliance with SHPO procedures, also applies to Alternative VI. Implementation of this measure would reduce impacts to the shell midden to an insignificant level.
- 19.82. Page 3.5-1 - South San Francisco Police Department has 73 sworn officers and has authorization for 35 volunteer reserves with only 23 volunteer reserves actually available at this time.
- Response.** Based on updated information provided by the commentor, page 3.5-1, paragraph four, sentence one of the DEIR/Technical Appendix is amended as follows:
- The South San Francisco Police Department, located at 33 Arroyo Drive, currently has 75  
73 sworn officers ~~on six shifts and 20 volunteer resources on six shifts~~ ~~authorization for~~  
~~35 volunteer reserves with only 23 volunteer reserves~~ ~~actually available at this time.~~
- 19.83. More specific data should be provided on how many additional officers will be hired by BART and their deployment to handle expansion of the service down the Peninsula. General statements about BART "providing appropriate staffing" does not give reviewers of this document any comfort level that the impact on local police services would be minimized.
- Response.** BART management determines the appropriate staffing levels of police patrolling existing stations and will do so for all new stations. BART Police will take into consideration patron and community needs in assigning security personnel to stations along the alignment.

19.84. BART representatives should interact with department representatives responsible for environmental design security and safety issues as local representatives often have "local knowledge" that may influence specific station design. Also BART should comply with the South San Francisco Municipal Security Standards Ordinance when building the Hickey station.

**Response.** Final design of the stations will be performed by BART in consultation with the local jurisdictions. Input from cities on environmental design and safety issues, including the South San Francisco Municipal Security Standards Ordinance, will be solicited and efforts made to improve station layout, circulation, and surveillance to minimize crime.

19.85. It seems that the local agencies should not be expected to absorb added problems caused by BART without BART providing added personnel to police expansion of its own system. An appropriate mitigation measure would seem to be that BART should attempt to have a unit on duty at each station site continuously except between 1:30 am and 6:00 am, whenever possible....Information from police jurisdictions with BART facilities already in place tends to indicate that BART Police falls short on handling incidents that occur on their property now; therefore, mitigation that references BART merely extending their current coverage levels to new facilities does not appear to adequately address the issue.

**Response.** The DEIR/Technical Appendix at page 3.5-8, paragraph 2, indicates the shifts for BART police. Based on this information, BART police do provide continuous coverage and, consequently, the commentor's suggestion to have a unit on duty at each station site is already addressed.

The commentor also indicates that extension of current BART coverage levels to new facilities would be inadequate. The DEIR/Technical Appendix on page 3.5-12 indicates that BART's intent is, in fact, to improve upon current coverage levels by increasing police staff and acquiring additional equipment.

BART plans to provide continuous coverage of the proposed BART extension by increasing police staff and acquiring additional equipment. BART Police will hire up to 10 additional BART police officers, not including support staff, to service the proposed BART extension.

19.86. No analysis or comment was made in regards to impacts on the city's Communications section through their screening, prioritization, and dispatch/referral of 911 calls from BART facilities.

**Response.** Please refer to Responses 14.57, 16.2, and 16.7 for a discussion of BART's effects on local police services.

19.87. Pages 3.5-14 thru 3.5-16 [of the DEIR/Technical Appendix], Wastewater - The South San Francisco Joint Sewer Facilities treatment plan is currently under study to determine the plant's capacity. Until this study is completed the following statements should be removed from the document as they are not considered factual:

- Page 3.5-14, paragraph [5]: "The South San Francisco Joint Sewer Facilities Treatment plant capacity is 9 mgd; the current average dry-weather flow is 7.5 mgd."
- Page 3.5-16, first paragraph: "Pending the results of this test, it is assumed that cumulative development plus BART may adversely affect wastewater treatment services, resulting in a potentially significant impact."
- Page 3.5-16 paragraph 4: "As noted above, these future demands might be accommodated, depending on the plant's capacity following modification."

- Page 3.5-15, second paragraph from bottom: The EIR states that the current entitlement contract for the California Water Services Company is in effect through 2009 [and] allows for 42.3 mgd of water. Is the entitlement for their total service area?
- Page 3.5-15, last paragraph: The wastewater generation is conservatively estimated at 7.05 mgd by 1998 and 7.4 mgd by 2010. How was this conclusion reached?

**Response.** The commentor's remarks relating to the South San Francisco Joint Sewer Facility have been acknowledged. The City of South San Francisco has re-evaluated the facility's wastewater capacity and current flows. The results are contained in a report dated October 1995, prepared by John Carollo Engineers entitled, "City of South San Francisco, San Bruno, Wastewater Treatment Facility - Final Report." Results of this study confirmed the total design capacity to be 9.0 mgd. The available capacity stated in the document was based on an unconfirmed capacity of 9.0 mgd. The information presented in the document was factual at the time it was prepared and the capacity figure coincides with the 1995 report. Based on this report, the Joint Sewer Facilities plant has embarked on a number of improvements to the treatment plant to accommodate long-term demands. (Castagnola, 1995).

Regarding the fourth bullet above, the entitlement contract referenced is for the entire City of South San Francisco, which is not the entire service area for the California Water Services Company. This company also serves the Town of Colma and the Cities of San Mateo and San Carlos.

The response to the question posed in the last bullet can be found in the methodology discussion on page 3.5-10 of the DEIR/Technical Appendix. Since wastewater generation is a factor of water consumption, it was conservatively estimated that all water consumed would be conveyed to the wastewater treatment plant. This is a conservative estimate because some portion of water is used for irrigation or other purposes that keep it out of the wastewater stream. Thus, the cumulative wastewater estimates are the same in 1998 and 2010 for both water and wastewater.

19.88. The EIR should include information to verify whether BART property is considered public property in relation to enforcement of the California Vehicle Code and that BART Police will handle all accident and vehicle code violations on site. The document only references BART handling crime problems at station sites.

**Response.** BART stations and facilities are considered public property. BART police handle all vehicular accidents and vehicle code violations on BART property, except for accidents and code violations involving school buses, which are handled by the California Highway Patrol.

19.89. The City strongly supports Mitigation Measure 2.1 [Avoidance of Wetlands], which avoids filling existing wetlands. Construction of a deeper subway at this location would mitigate a number of other impacts.

**Response.** In consideration of this comment and others, a portion of the cut-and-cover alignment near South Spruce Avenue in South San Francisco has been redesigned to reduce impacts to wetlands. The subsurface segment of BART is now lower, thus eliminating the need to fill existing adjacent wetlands. Please refer to Volume IV, Design Appendix, of this FEIR/FEIS for the revised alignment.

19.90. The City has reviewed the hydrology section of the DEIR and fears that the project will worsen existing conditions....The BART/Colma Creek Realignment Schemes should ultimately be incorporated into the BART Project. In the alternative, if the Study's realignment schemes prove unfeasible, the BART Plan should at a minimum be designed to allow Colma Creek to flow above BART facilities....Although, it is stated that BART will design their facilities to accommodate...a 100 year storm....it is not clear if this standard will apply to the reconstruction of Colma Creek.

**Response.** Hydrology studies demonstrate that the proposed Hickey Station will not exacerbate existing conditions. The Colma Creek alignment adopted for the project is Reimer Report's Alternative II, plus the addition of a detention structure in the box culvert beneath the station's parking lot, as discussed in Response 15.4. The cumulative effect of the detention structure and downstream improvements would be to maintain existing flow rates in the canals downstream of Hickey Station. Please refer to Volume IV, Design Appendix, of this FEIR/FEIS for the revised alignment.

- 19.91. Page 3.8-2. The [third] sentence of the second [fourth] states: "Colma Creek is sized adequately to contain the 100 year storm event, and FEMA maps show this storm even to be contained in channel. This indicated that the channel is adequate to carry the flow from upstream without overtopping the banks." This statement is certainly not true for the portion of Colma Creek within South San Francisco, as no section of the creek within our City can accommodate a 100 year storm. In fact, much of Colma Creek can not handle a 50 year event, as the County Flood Control District has not yet improved all constrictions along the creek.

**Response.** Page 3.8-2, paragraph four of the DEIR/Technical Appendix is revised as follows:

The northern portion of the project corridor generally follows the existing alignment of Colma Creek. Colma Creek is an urban stream with a highly developed watershed that includes the Colma Creek and Guadalupe Canyon Basins. Since 1974, Daly City, Colma and South San Francisco have undertaken a number of projects to upgrade Colma Creek and collection facilities within the basin to provide conveyance capacity adequate to carry storm flows resulting from a 50-year storm. Colma Creek is sized adequately to contain the 100-year storm event, and FEMA maps show this storm event to be "contained in channel." This indicates that the channel is adequate to carry flow from upstream without overtopping the banks. Nonetheless, the FEMA maps also show flooding around the channel as many areas along Colma Creek are subject to flooding....

The water level for the 50-year storm in the channel is two feet below the crest of the channel. There is two feet of freeboard. If the channel is filled to the top, the flow capacity is adequate for a 100-year storm. FEMA maps are shown in Figures 3.8-1 and 3.8-2 of the DEIR/Technical Appendix. The flood plains describe the current flood plain areas for a 100-year storm. The improvements to Colma Creek will virtually eliminate surface flooding for a 50-year design storm as well as a 100-year storm. Surface run-off over the parking areas will still occur for storm intensities greater than 100 year. See also Response 15.4.

- 19.92. Mitigation Measure 2.2 [Drainage System Improvements], on page 3.8-13 of the E.I.R. discusses constructing a 1,250 foot-long, 11'x8' concrete box culvert to store flood water from impervious areas of the project, thereby reducing the peak storm water flows into Colma Creek. The responsibility for the operation and maintenance of this storage facility should be discussed in the report.

**Response.** BART will operate and maintain its own facilities. However, in future negotiations, the subject box culvert may become the property of the Flood Control District or other municipality, wherein operation and maintenance issues will be negotiated between BART and the subsequent owner. There is negligible maintenance to perform in such concrete culverts.

- 19.93. Mitigation Measure 3.1 [Stormwater Infiltration] on page 3.8-14 of the EIR discusses stormwater infiltration improvements for the BART Project that will require additional land to install the infiltration facilities. Where on the BART station plans is the additional land that will accommodate these improvements?

**Response.** As stated on page 3.8-14 of the DEIR/Technical Appendix, the adequacy of stormwater infiltration in Mitigation Measure 3.1 will be determined via a monitoring program

and/or in the hydrologic study during preliminary engineering. Additional acreage for such measures is available above subway sections of the alignment in the original flood plain.

- 19.94. Mitigation Measure 5.1 [Oil and Water Separators in Catch Basins], page 3.8-16..."Although these separators are generally effective in removing oils and other large sediments, they do not remove dissolved toxins or heavy metals which may be suspended in the run-off waters. The best way of controlling these compounds is by preventing them from entering the system." The EIR should state how this can be accomplished and prepare an appropriate mitigation measure.

**Response.** Mitigation Measure 5.1 on page 3.8-16 of the DEIR/Technical Appendix has been revised and an additional mitigation measure has been created to address dissolved toxins:

**MITIGATION MEASURES.** The following mitigation ~~measure~~ measures would reduce the impact of nonpoint source pollution to an insignificant level.

5.1 *Oil and Water Separators in Catch Basins.* BART will require in its construction documents that oil and water separators be installed in catch basins located in parking lots to separate contaminants from runoff entering the stormwater system. The effectiveness of these separators depends upon the level of maintenance they receive. BART will regularly clean out these separators before the rainy season. ~~Although these separators are generally effective in removing oils and other large sediments, they do not remove dissolved toxins or heavy metals which may be suspended in the run-off waters. The best way of controlling these compounds is by preventing them from entering the system.~~

5.2 *Best Management Practices.* ~~Oil/water separators are generally effective at removing oils and large sediments; they do not, however, remove dissolved toxins or heavy metals which may be suspended in the stormwater runoff. The best way of controlling these compounds is by preventing them from entering the system. To reduce these pollutants, BART will apply Best Management Practices including regular sweeping of the parking areas, strict adherence to guidelines regarding application of fertilizers and pesticides in landscaped areas, and regular cleaning and maintenance of catch basins.~~

- 19.95. The third paragraph of the "Cumulative Analysis" subsection at the top of page 3.8-20, states: "The San Mateo County Flood Control District will be the responsible agency to assure there is a comprehensive approach to addressing flooding on Colma Creek." This statement should be verified with the Flood Control District to determine if they acknowledge this responsibility.

**Response.** BART and the San Mateo County Flood Control District are engaged in ongoing discussions regarding the upgrade of the Master Plan for improvements along the entire creek. The Flood Control District has acknowledged that it will be the responsible agency to ensure a comprehensive approach to Colma Creek flood control.

- 19.96. There appears to be no discussion of the impact of the BART construction on the 12 mile creek channel and its confluence with Colma Creek. Also, the impact of this project on the Spruce Creek drainage system should be reviewed. In particular, the ability of the storm water to flow unimpeded under or over the BART facilities, upon their installation, should be discussed and evaluated. If the storm water flow will be restricted in any way due to the BART project, a significant impact would result that must be mitigated in order to prevent flooding within the Francisco Terrace neighborhood.

**Response.** BART construction would temporarily affect a number of drainageways along the alignment. This is recognized in Section 3.8, Hydrology and Water Quality, of the

DEIR/Technical Appendix as a significant impact. The commentor correctly notes that 12 Mile Creek would be one of the drainageways that would be affected. Accordingly, the DEIR/Technical Appendix discussion of each project alternative is amended to acknowledge temporary disturbance to this creek. The impact to 12 Mile Creek would be mitigated to an insignificant level through adoption of the same mitigation measures as already recommended for other affected drainageways (i.e., dry season construction and maintenance of unobstructed drainageways). No new impacts would result from implementation of these measures.

Page 3.13-148, Impact 3, second paragraph is revised as follows:

Construction of the proposed project would temporarily divert 500 feet of Colma Creek north of Chestnut Avenue, 200 feet of 12 Mile Creek south of Chestnut Avenue, 500 feet of Cupid Row Canal south of Lion's Field Park, and 700 feet of Cupid Row Canal at the San Bruno Avenue crossing.

Page 3.13-151, Impact 3, first paragraph is revised as follows:

Construction of the Base Case Alternative would temporarily divert 500 feet of Colma Creek north of Chestnut Avenue, 200 feet of 12 Mile Creek south of Chestnut Avenue, and 600 feet of drainage channel along the easterly side of the SPTCo tracks and north of the Cupid Row Canal crossing.

Page 3.13-152, Impact 3, first paragraph is revised to read:

Construction Alternative IV would divert 500 feet of Colma Creek north of Chestnut Avenue, 200 feet of 12 Mile Creek south of Chestnut Avenue, 600 feet of drainage channel along the easterly side of the SPTCo tracks and north of the Cupid Row Canal crossing, and 400 feet of South Lomita Canal north of the Millbrae Intermodal Station.

Page 3.13-153, Impact 3, first paragraph is modified as follows:

Construction of Alternative V would temporarily divert 500 feet of Colma Creek north of Chestnut Avenue, 200 feet of 12 Mile Creek south of Chestnut Avenue, 600 feet of drainage channel along the easterly side of the SPTCo tracks and north of the Cupid Row Canal crossing, and 400 feet of South Lomita Canal north of the Millbrae Intermodal Station.

Page 3.13-155, Impact 3, first paragraph is modified to read:

Construction of Alternative IV would divert 500 feet of Colma Creek north of Chestnut Avenue, 200 feet of 12 Mile Creek south of Chestnut Avenue, 600 feet of drainage channel along the easterly side of the SPTCo tracks and north of the Cupid Row Canal crossing, and a portion of Cupid Row Canal at the point where the alignment crosses the canal.

- 19.97. Overall, the level of detail provided regarding noise and vibration impacts relies too heavily on future studies to determine appropriate mitigation without ensuring specific noise or vibration levels....It is critical that prior to construction acoustical engineering studies be completed which can demonstrate that the system is designed so that there will be no perceptible increases in vibration and that any noise level increases will comply with the City's Noise Ordinance....There should be monitoring of any mitigation which provides for additional measures to be taken if the proposed mitigation, once implemented, is found to be inadequate once BART service begins.

**Response.** The City of South San Francisco's Noise Ordinance applies to stationary noise sources (e.g., equipment) and not moving noise sources (such as motor vehicles or trains). Even so, it should be noted that BART's noise criteria are within the City's Noise Ordinance limits. In contrast, automobiles, trucks and buses typically exceed the City's Noise Ordinance limits. BART's noise criteria for stationary noise sources (i.e., ancillary facilities) are the same as those of South San Francisco.

Mitigation monitoring requires confirmation that mitigation has been implemented and the mitigation implemented is effective. Further design refinement of the specific details of noise and vibration mitigation is necessary because BART must make decisions regarding final locations for sound walls. Additional vibration data must also be obtained to characterize local soil conditions along the selected alignment. BART is committed to implementing mitigation measures that satisfy the noise and vibration limits indicated in the DEIR/Technical Appendix (see pages 3.9-11 to 3.9-16). Please refer also to Response 19.11.

- 19.98. Figure 3.9-3. Regarding monitor locations 6 & 7, one monitor (preferably no. 7) should have been placed on the northerly side of the alignment adjacent to Mayfair Village residences. No. 7 appears to have been located on the High School football field. How was this site determined?

**Response.** The noise surveys are used to characterize the existing ambient environments. Noise survey locations are chosen to be at or near noise-sensitive receptors (e.g., residences, schools) or groups of receptors. The measurement at South San Francisco High School reflects noise contribution from outdoor activity at the high school.

- 19.99. Table 3.9-2. Sites Nos. 5, 6 and 7 should be identified as "Average Residential," rather than "High Density Residential."

**Response.** The ambient noise surveys indicate the existing noise environment used in part to determine appropriate noise and vibration criteria for different land use areas and different noise environments. Although the land use is suburban residential, the ambient noise environment in the area of noise survey location Numbers 5, 6 and 7 are consistent with Area Category III. For single family residences, Criteria Area Categories II and III are the same in nearly every respect regarding noise and vibration criteria. See Tables 3.9-3, -4 and -5 of the DEIR/Technical Appendix. Please refer to Response 72.249.b for a discussion of the classification of criteria area categories.

- 19.100. Sufficient detail is not available in the DEIR to provide this City with any comfort level about how the project can be constructed and operated without either groundborne...vibrations significantly impacting these units [Treasure Island Trailer Court].

**Response.** The level of detail provided concerning vibration impacts is consistent with federal and state requirements for a DEIR/SDEIS and reflects the state of currently available data. Engineering design calculations will be performed in the preliminary design phase to determine specific mitigation requirements. The forms of vibration mitigation discussed in the DEIR/SDEIS have been used successfully elsewhere in North America, including Atlanta, Washington DC, and Toronto. The analysis determined that significant vibration impacts can be mitigated for the mobile homes at Treasure Island Trailer Court.

- 19.101. Additional information should be provided as to where the measurements to sensitive receptors are taken from. Is it from center trackline to property line? Center trackline to residence? It is important to clarify that due consideration has been given to impacts upon outdoor areas as well as indoor areas.

**Response.** Please refer to Response 19.14. The distance used in the analysis is from the nearest track centerline to the nearest building. When a property is close to the alignment (e.g., abuts the

right-of-way), the mitigated levels of noise within yards or outdoor areas used for recreation are essentially the same. When a property is farther away (50 to 100 feet), the unmitigated noise levels in the yard and at the associated residence are similar.

- 19.102. Page 3.9-23, paragraphs one and three refer to residences on Francisco Drive in the Town of Baden neighborhood. The homes are located in the Francisco Terrace neighborhood.

**Response.** The neighborhood boundaries used for this analysis were provided by the City of South San Francisco. In the City's scheme, a Francisco Terrace neighborhood was not identified, and the residences on Francisco Drive were encompassed by the Town of Baden. Regardless of which neighborhood the homes lie in, the noise analysis would be the same.

- 19.103. Paragraph 2 [page 3.9-23] refers to a crossover located near four homes on Myrtle Avenue Is there flexibility to relocate this to a less sensitive area, possibly south of South Spruce?

**Response.** Mitigation Measures 4.1 and 4.2 on pages 3.9-23 and 3.9-24 of the DEIR/Technical Appendix describe floating slabs and resiliently supported ties, which would reduce the impacts to homes on Myrtle Avenue to an insignificant level. Because of BART Design Criteria and the track configuration north of the Tanforan Station, it is not feasible to relocate the crossover south of South Spruce Avenue.

- 19.104. No information is provided regarding noise and vibration impacts at the SSF Boys and Girls Club, located adjacent to the ROW at West Orange Avenue. These impacts must be discussed since the BART line would pass, in either retained cut or subway, within 10-15 feet of the building.

**Response.** For the Base Case Alternative, a sound wall would be constructed adjacent to the Boys and Girls Club to mitigate airborne noise from BART trains. There would be no significant groundborne vibration at this building under this alternative. There should be no significant noise or vibration impacts from the subway line proposed under the other alternatives.

- 19.105. No information is provided relative to any potential [air quality] impacts on the Francisco Terrace Tot Lot. The proposed overcrossing at South Spruce Avenue, which will elevate the roadway approximately 10 feet, will cause trucks to gear down to make the grade which may produce added noise and air pollution. These impacts should be analyzed.

**Response.** Under the 1992 LPA, I-380 Least-Cost LPA, and Alternatives III, IV, V-A, V-B and VI, the type of truck noise at issue (i.e., due to increased truck engine load as a result of the overpass grade) should not cause significant impact for the Francisco Terrace Tot Lot, because the amount of heavy truck traffic on South Spruce Avenue is minor. There would be no means of effectively reducing truck exhaust noise with a feasible height sound wall. An effective noise wall would need to be over 10 feet high, which would substantially increase structural loads on the overpass. The visual impact of such a wall would also be significant (i.e., the height of the top of the wall would be over 16 feet above the Tot Lot and cast a shadow for much of the morning). Raising the roadway would actually improve the existing ambient noise environment at the Francisco Tot Lot by providing shielding at the edge of the overpass.

Air quality impacts at the Francisco Terrace Tot Lot resulting from the proposed change to the vertical alignment of South Spruce Avenue which is being incorporated into the Aerial Design Option LPA are not considered significant. Carbon monoxide (CO) concentrations at this location are not anticipated to exceed federal or California 1-hour or 8-hour standards because 1) the Lot is not immediately adjacent to queued vehicles at the intersection of South Spruce and Huntington Avenues and therefore would not coincide with the location of the highest predicted CO concentrations at this intersection; 2) the highest predicted CO concentrations at the intersection of South Spruce and Huntington Avenues would be lower than those predicted at the intersection of South Spruce Avenue and El Camino Real; and 3) the highest predicted CO concentrations at

the intersection of South Spruce Avenue and El Camino Real are less than the federal and California 1-hour and 8-hour CO standards under all BART alternatives in all analysis years.

Microscale CO sensitivity analyses were performed to determine the relationship between predicted CO concentrations and several important parameters, including receptor location. These sensitivity analyses indicated that, at a given intersection, the highest predicted CO concentrations occur immediately adjacent to the vehicle queues that develop at each approach leg of the intersection. Predicted CO concentrations are considerably lower at greater distances from the roadway and at other locations along the roadway (i.e., either along the depart leg of the intersection or along the approach leg prior to the vehicle queue). This localization of predicted high CO concentrations may be attributed to the high CO emission rates (mass per time) of vehicles idling at the intersection. Although the proposed South Spruce Avenue vertical realignment would result in increased vehicular CO emissions at the overpass approaches, the associated incremental increase in CO concentrations at the Francisco Terrace Tot Lot would be minor, and the resulting total CO concentration at the Lot would still be considerably lower than those in the immediate vicinity of the intersection.

The methodology employed in the selection of roadway intersections for microscale CO analysis is described in detail in Section 5.5.1 of the Air Quality Technical Report. The selection methodology was designed to select those intersections where CO concentrations are expected to be highest, taking into consideration traffic volumes and intersection level of service (LOS) designation under each BART design alternative in each analysis year. The intersection of South Spruce and Huntington Avenues was not selected for microscale CO analysis because under all BART alternatives in all analysis years, the highest predicted CO concentrations at South Spruce and Huntington Avenues would be lower than at the intersection of South Spruce Avenue and El Camino Real, when predicted concentrations are within the federal and California 1-hour and 8-hour CO standards.

However, under the design refinements under the Aerial Design Option LPA, the BART profile would be lowered to maintain the existing road surface of South Spruce Avenue. Therefore, there would be no increases in noise or air pollution. Please refer to Response 16.80 for further discussion of traffic impacts to air quality along the indicated streets connecting I-280 with El Camino Real.

- 19.106. Page 3.9-23, Mitigations 4.1-4.4 [Floating Slab Trackbed; Resiliently Supported Tiles or Soft Rail Fasteners; At-grade Sound Wall; and Offsite Mitigation]. Will these measures [noise and vibration] mitigate impacts to the Treasure Island Trailer Court?

**Response.** For all BART alternatives, the alignment would cause significant impacts in the vicinity of the Treasure Island Court. Mitigation Measures 4.1, 4.2, and 4.4 are the potential forms of mitigation for groundborne noise and vibration impacts at the Treasure Island Trailer Court. Engineering studies in the preliminary design phase would evaluate the use of Mitigation Measures 4.2 and 4.4 as alternative mitigation measures to Measure 4.1. Implementation of any one of these measures would reduce noise and vibration impacts to an insignificant level. As a result, text on page 3.9-78 regarding Alternative VI is revised. For Impact 4, the first sentence under Mitigation Measures is modified as follows:

Implementation of Mitigation Measures 4.1, 4.2, 4.3, and 4.4, and 4.5, i.e., compliance with design limits through use of a floating slab trackbed, resiliently supported ties or soft rail fasteners, at-grade sound wall or other equivalent mitigation measures, offsite mitigation and relocation, as recommended for the proposed project, would reduce the impacts of Alternative VI to an insignificant level. except possibly for the homes in the Treasure Island Trailer Court and along Myrtle Avenue.

- 19.107. Page 3.9-39. While soundwalls are offered as mitigation there is no detail about where they will be located, what they will look like, how high they will be, or whether the sound walls proposed

adjacent to residences or other sensitive receptors will attenuate sound to a level that will allow for comfortable use of outdoor as well as indoor areas. Additional data must be provided.

**Response.** The specific location of sound walls to mitigate BART train noise would be determined in the preliminary design phase after an alignment is approved. Sound walls are typically located on the BART structure (usually 9 feet from track centerline) or along the right-of-way (which is also often the property line of residences or other sensitive receptors). The height of sound walls depends on the distance from the tracks, and is usually six to nine feet high for at-grade tracks and somewhat lower for retained cut tracks. The BART system design criteria are based on a comfortable noise environment both inside and outside.

- 19.108. A mitigation should be proposed for BART to provide a resource person, especially during construction, to deal with all BART related noise complaints.

**Response.** Experience with other recent BART construction projects confirms such a need. There would be a community relations person available throughout the construction of the project to address any issues raised by individuals in the community concerning noise. Also, as part of the mitigation monitoring during construction, noise would be monitored on a regular basis to determine compliance with the construction noise limits for the project.

- 19.109. The possible mobilization and lay down areas section, page 3.13-6, should include a discussion of the impacts that using these areas for a construction will have on adjacent businesses and businesses that will be displaced by the use of these areas.

**Response.** Any business or dwelling unit displaced by a mobilization and lay down area would be covered by provisions of relocation law as described on page 3.2-57 of the DEIR/Technical Appendix.

- 19.110. South Spruce Avenue Reconstruction (page 3.13-28, [Impact] 2, Mitigation 2.1 [Construction of a Detour], & page 3.13-34). The mitigation offered is construction of a detour on the north side of South Spruce. It should be noted that the Boys and Girls Club is not located adjacent to South Spruce, as indicated, but at West Orange Avenue. Instead, as proposed, the detour would displace the Francisco Terrace Tot Lot.

**Response.** The commentor is correct that Mitigation Measure 2.1 on page 3.13-28 of the DEIR/Technical Appendix mistakenly identifies impacts to the Boys and Girls Club, whereas the Francisco Terrace Play Lot would in fact be affected. Therefore, the last sentence of Mitigation Measure 2.1 on page 3.13-28 of the DEIR/Technical Appendix is revised as follows:

However this measure may temporarily reduce the number of parking spaces for the Boys and Girls Club at the northeast quadrant of the junction of the right-of-way and South Spruce Avenue affect Francisco Terrace Play Lot.

Implementation of revised plans for crossing under South Spruce Avenue would reduce impacts to the Francisco Terrace Play Lot by eliminating the need for retaining walls that create a visual barrier (see Response 19.8).

- 19.111. Page 3.13-28, [Impact] 3. South San Francisco disputes the LOS findings at these two intersections.

**Response.** The intersections referred to in this comment are El Camino Real/Westborough and Chestnut/Antoinette Lane. The level of service at El Camino Real/Westborough significantly improves under the BART build alternatives compared to the No Build Alternatives because of the redistribution of traffic resulting from the completion of the Hickey Extension. The intersection of

Chestnut/Antoinette Lane remains at LOS A under all alternatives in all three analysis years. The calculation sheets for all intersections analyzed in all analysis years are available as appendices to the Transportation Technical Report in Volume V of the FEIR/FEIS. The methodology used to calculate the level of service is the same as the San Mateo County Transportation Authority used in its Congestion Management Plan.

- 19.112. Page 3.13-34, Item 3. The discussion refers to coordinating the opening of Hickey Boulevard Extension. Does the BART Base Case propose to construct the Hickey Extension?

**Response.** BART does not propose or plan to construct the Hickey Extension under the Base Case Alternative. BART recommends coordinating the proposed mitigation (i.e., construction of the Oak Avenue Extension) with the opening of the Hickey Boulevard Extension, not that BART would coordinate the opening of the Hickey Extension. The statement "coordinate opening of Hickey Boulevard extension..." under Impact 3 on page 3.13-34 of the DEIR/Technical Appendix is revised to read, "...coordinate with the opening of Hickey Boulevard extension..."

- 19.113. [Impact] No. 9 as discussed on page 3.13-30 again describes the loss of the pedestrian paths across the BART alignment as being "not significant". As previously stated, these pathways have been in continuous, unrestricted use for 30-40 years. Three of the paths have permanent bridges constructed across Colma Creek to accommodate pedestrian travel. Where reasonable alternatives can not be provided for pedestrian travel along existing public streets, a significant impact would result that should be mitigated.

**Response.** Please refer to Responses 19.53 and 19.55 for a discussion of consideration of impacts to these pedestrian crossings.

- 19.114. The Design Appendix outlines a construction easement throughout the alignment that traverses numerous private properties....No description is provided in the document as to the purpose or impact of such easements. This detail is needed to assess whether an impact exists.

**Response.** As discussed on page 3.13-6 of the DEIR/Technical Appendix, temporary subsurface easements and construction easements to be used as potential laydown sites for contractor mobilization and material storage have been identified along the alignment. Please refer to Response 19.18 for a discussion of impacts.

- 19.115. Page 3.13-58, [Impact] 5. The Town of Baden subdivision is not located adjacent to South Spruce Avenue. This discussion should be clarified.

**Response.** In recognition of this comment, the text is modified to clarify the area where South Spruce Avenue would be raised to cross over the BART alignment and disrupt access to certain businesses. On page 3.13-58, paragraph three of the DEIR/Technical Appendix is revised as follows:

- 5) *Construction of the South Spruce Avenue overcrossing would disrupt businesses along this thoroughfare adjacent to the Town of Baden west of the Huntington Avenue neighborhood. (S)*

- 19.116. Page 8, Figure 5, & page 29, Figure 5 Design Appendix. It would appear that the Ron Price temporary new vehicle storage lot, along the West side of Antoinette Lane, will be severely impacted, if not eliminated during and after the construction of the BART project. The impacts of the loss of this storage lot on Ron Price's business operation should be discussed.

**Response.** Please refer to Response 19.62 for a discussion of displaced businesses. The business operation will not suffer a loss of auto storage parking due to BART construction, as BART would

coordinate temporary replacement parking with the business owner during construction. In accordance with federal and state relocation laws (as applicable), permanent auto storage parking may be provided to the business owner to help offset the loss of parking.

- 19.117. About 40 trailers within the Treasure Island Trailer Court, along the former railroad right-of-way adjacent to Mission Road, will have to be relocated to permit the construction of BART. Where will the trailers and their residents be housed during construction? Will they be permanently returned to their original location or will they be permanently relocated to a different site? Where would this site be?

**Response.** The easement shown on the S.F. Water Department property currently leased to the Treasure Island Mobile Home Park, and occupied by mobile homes, is a temporary sub-surface easement which will be used only for tie-back anchoring devices installed more than 10 feet below the surface. These devices will not disturb the mobile homes or their occupants. Please refer to Response 19.114.

- 19.118. At the vicinity of Chestnut Avenue it appears that the Garden Center Nursery and the diner on Antoinette Lane will be impacted or closed during the construction of BART and possibly upon its completion. These impacts need to be discussed and...evaluated.

**Response.** Please also refer to Response 19.62 for a discussion of the approach in the environmental documents to individual cases of displacement.

- 19.119. Construction land use Mitigation Measure No. 5, page 3.13-55, [recommends implementation of Mitigation Measure 3.1, Coordination with Cities and Communities, on page 3.13-54 of the DEIR/Technical Appendix, and] discusses the impacts that the project will have on various adjacent businesses. However, maintaining access to the businesses by bob-tail and semi-trailer delivery trucks should be discussed....Mitigation measures should be implemented to accommodate business deliveries during the entire construction period.

**Response.** In recognition of this comment, the text is modified to clarify that maintaining vehicular access to businesses includes trucks as well as automobiles and pedestrians. On page 3.13-55, paragraph three sentence two of the DEIR/Technical Appendix, the text is modified as follows:

To minimize these effects, BART will require its construction contractors to close streets one half at a time, with two-way traffic provided on the other half; provide temporary walkways with a width of not less than 4 feet ~~so that no business entrance is blocked; maintain access for truck deliveries to the businesses;~~ and limit temporary total street closure to non-business hours.

- 19.120. Page 3.13-165, South San Francisco. Special sensitivity should be given to the construction noise impacts to the Treasure Island Trailer Court since it can be anticipated that trailers would have significantly less noise insulation than standard construction would provide. This discussion should also include SSF Boys & Girls Club and Francisco Terrace Tot Lot as sensitive receptors.

**Response.** The mobile homes at Treasure Island Trailer Court would be close to the construction on the project. The DEIR/SDEIS indicates that construction noise mitigation measures (e.g., temporary noise barriers) would be needed to mitigate for off-site construction noise. The South San Francisco Boys and Girls Club is not considered to be a sensitive receptor for construction noise, so temporary noise barriers would not be implemented. The Francisco Terrace Tot Lot falls within the temporary construction easement for the project; it is assumed that no access would be allowed to the site during construction in the area.

19.121. Page 3.13-198-199. The mitigations should replace the word "should" with "shall" and should include the cities in the review process.

**Response.** To be consistent with the manner in which other mitigation measures are presented in the DEIR/Technical Appendix, the air quality mitigation measures on pages 3.13-198 through 3.13-199 are revised to replace "should" with "will." It should be noted that at the time BART prepares a Mitigation Monitoring Program, the final adopted measures will be known and become mandatory. Until that time, whether the measures are stated as recommendation (should) or mandatory (will) is not critical. BART will consult with the cities for further refinement of mitigation measures.

19.122. The profiles of the BART alignment contained in the design appendix do not show most of the utilities that cross the right-of-way. It is not clear if all of the sewer mains that currently cross the BART alignment will continue to cross the right-of-way at their present grade, thereby preserving gravity flow through the system. This matter should be investigated for all gravity utility crossings.

**Response.** The design of the vertical alignment is nearing completion of the Preliminary Engineering phase. Existing utilities, including gravity storm and sanitary sewers, are being researched to verify existing vertical grades at crossings with the proposed BART alignment. At points of conflict, either the BART alignment will be modified to clear the utility in its present location or plans will be developed to relocate the utility as required to maintain gravity flow.

Please refer also to Responses 17.84 and 17.85 regarding utility relocations.

19.123. If the integrity of the existing pipe systems cannot be maintained, a significant impact would result that must be mitigated. Any solution other than a gravity system would also have a significant impact on City maintenance services, equipment, materials, energy costs and liability exposure that must be evaluated.

**Response.** Please refer to Responses 17.84, 17.85 and 19.122 regarding utility relocations.

19.124. Storm Drainage - The profiles of the BART alignment contained in the Design Appendix do not show most of the storm drains that cross the BART right-of-way to empty into Colma Creek. It is not clear if all of these storm drains (such as the two Evergreen storm drain pipes) will be able to continue to cross the BART alignment at their present grades, thereby preserving gravity flow through the systems. This matter should be investigated for all storm drain crossings. If the integrity of the existing storm drains can not be maintained, a significant impact would result that must be mitigated. Any solution other than a gravity system would have a significant impact on City maintenance services, equipment, materials, energy costs and liability exposure that must be evaluated.

**Response.** Please refer to Responses 17.84, 17.85 and 19.122 regarding utility relocations.

19.125. Figure 5 on page 145 of the Design Appendix shows a proposed substation on Shaw Road....Several existing utility lines (including a City sewage force main) within Shaw Road are protected from corrosion by cathodic systems that would be defeated by this electric transmission facility....Any disruption of this protection could have very serious and disastrous consequences.

**Response.** The proposed Shaw Road substation is an ac high-voltage facility which will transform 115 kV ac power to 34.5 kV ac. As such, like the 115 kV PG&E transmission lines from where the substation derives its power, it is not expected to interfere with any cathodic protection systems for utility lines in the area.

19.126. Material delivery frequency, vehicle weights, routes, interval between deliveries and size of vehicle should be discussed and mitigated if appropriate.

**Response.** The number of estimated construction vehicles for each alternative is shown in Tables 3.13-4 through 3.13-10 of the DEIR/Technical Appendix. The impacts of these vehicles are discussed primarily in Section 13.3, Construction/Transportation, and Section 13.4, Construction/Land Use of the DEIR/Technical Appendix. As noted in Response 17.70, agreements must be reached with each city regarding haul routes and weight limitations.

19.127. The number of worker vehicle trips per day into and out of the construction site should be determined. Where will they park? Will the parking area be surfaced and drainage and lighting systems provided? Where will the construction worker parking lot(s) driveway(s) enter the public street? What traffic control will be provided? Will temporary improvements (such as lighting and driveway approaches) be required to access the parking lot(s)? Is line-of-sight along the streets(s) at the driveway exit(s) sufficient for the prevailing speeds? What size parking lots will be required? These lots need to be separate from the laydown areas. Will existing parking be affected and to what extent?

**Response.** The expected number of construction workers at any one site is between 30 and 40. The number of private vehicles for these workers is not expected to overload nearby on-street parking. If necessary, BART will direct the contractor to provide parking within the contractor mobilization areas. The design of such off-street parking areas will conform with City regulations.

19.128. What will be the extent of construction site-to-site traffic? Will this need to be mitigated?

**Response.** These details will not be known until the construction contract is awarded. However, these concerns have been addressed and mitigated. A detailed construction plan must be prepared and implemented in accordance with applicable City requirements.

19.129. What will be the typical hours and days of construction activities? Will working on weekdays or holidays be required? Will significant impacts occur to the surrounding community due to evening, morning or weekend hours of work?

**Response.** Multishift and weekend work is expected to minimize the overall duration of the construction period, in accordance with City/agency requirements. The normal working periods will be eight hours per day, five days per week. All contractors will occasionally work extended hours during the day and on weekends as the need arises. Additional shifts may also be employed for special circumstances in the evening and nighttime hours. The work to be accomplished during these special periods will be arranged and scheduled to minimize adverse impacts on adjacent neighborhood.

19.130. Can detours and road closures be opened during non-working hours? Will special traffic control measures be employed during PM peak hours?

**Response.** If a detour is constructed to maintain traffic flow for a roadway that is partially or completely closed during construction of the BART-SFIA Extension, then such a detour would be opened throughout the required period of construction affecting that roadway and the detour would not be closed during non-working hours. A roadway that is partially or fully closed during construction would not be re-opened during non-working hours. Such a roadway would have detours, decking or both measures to maintain traffic flow during construction. Traffic management planning would be performed as part of the construction plan to address special traffic control measures to maintain traffic flow throughout the day. The traffic management plan would include information on the need for temporary detours, signage, public notices and methods of traffic control throughout the construction period. No special traffic control measures are anticipated specifically for the P.M. peak hours though the traffic management plan would provide

- further details on such special measures. Please also refer to Responses 21.15 and 41.27 for discussion of the traffic management plan.
- 19.131. What is the likelihood that surrounding public streets and utilities will be damaged during construction? Who will be responsible for making repairs to these facilities? How will the party causing the damage be identified?
- Response.** There is no evidence that the surrounding public streets and utilities will be damaged during construction beyond what is already discussed in the DEIR/Technical Appendix. Please refer to Responses 17.70, 17.85, and 19.126.
- 19.132. How will construction accidents be resolved?
- Response.** Any construction-period accidents, such as vehicular or property damage incidents, would be resolved on a case-by-case basis in accordance with current applicable law and regulations.
- 19.133. How often will public roads be cleaned? How will debris spilled on public streets be removed? How will dirt, debris and pollutants be prevented from entering Colma Creek and City storm drains during construction? This will be a severe problem during the winter months if construction continues during rainy periods.
- Response.** The contractors would be required to minimize spillage on the streets and highways in accordance with existing vehicle codes and ordinances. Mud or other debris would be hosed off trucks prior to leaving the construction sites. Spills would be cleaned up immediately. Permits obtained by the contractor from the cities and from the U.S. Army Corps of Engineers would specify construction practices to be followed to mitigate erosion runoff. Please refer to Mitigation Measure 1.6 on page 3.13-199 of the DEIR/Technical Appendix for a list of best construction practices to be implemented.
- 19.134. How will dust from the construction sites be controlled?
- Response.** Dust generated during construction activities will be minimized through the implementation of Mitigation Measure 1.6, Best Construction Practices. This mitigation measure is described on page 3.13-199 of the DEIR/Technical Appendix, and includes the following practices: watering and/or use of soil stabilizers, prompt replacement of ground cover in disturbed areas, enclosure and coverage of soil stockpiles, coverage of truck beds during hauling of soil, street sweeping, use of wash trucks or wheel washers, and limitation of traffic speeds to 15 mph or less in unpaved areas.
- 19.135. How will spills of hazardous materials be addressed? What type of hazardous materials will be transported along City streets and public highways?
- Response.** Response to accidental release of hazardous materials is discussed on pages 3.11-10 and 3.11-11 of the DEIR/Technical Appendix. Appropriate measures may include reporting the release to regulatory agencies and adherence to the *San Francisco BART Emergency Plan*. The types of hazardous materials that would be transported along city streets or public highways include gasoline, diesel, and oils, as well as construction materials such as paints, solvents, and sealers.
- 19.136. Will there be a demand to discharge water or waste into City storm drains or sanitary sewers? What permits are required before such discharges can occur? This should be discussed and the permits identified.

**Response.** The DEIR/Technical Appendix has been modified to discuss permits that are required in order to discharge water into City storm drains or sanitary sewers. The following sentences are inserted on page 3.13-108, paragraph two, between sentences one and two:

Prior to discharging water into City storm drains during construction, BART will fill out a Stormwater Pollution Prevention Plan (SWPPP) as a condition of approval for a Building Permit, which is issued by the City of South San Francisco Department of Public Works. For discharge of water into City sanitary sewers, a permit is required from the City of South San Francisco Water Quality Control Plant.

- 19.137. How will approvals be obtained before existing utilities are severed and by-pass utilities installed? What permits, review and approval are necessary to commence work relocations or rerouting existing utilities?

**Response.** BART will contact each jurisdiction and utility owner to determine permit requirements and to discuss utility relocation requirements. BART will then enter into agreements with the utility owners to codify the terms and conditions for relocations, standards, and liability for any damages.

- 19.138. What permits are necessary before construction work can begin?

- Grading permits
- Encroachment Permits
- Building Permits
- Storm Water Discharge Permits
- Sewer Discharge Permits
- Hazardous Materials Permits
- Hauling Permits
- Business Licenses

**Response.** Although BART is exempt from local building code and building permit process for its facilities, BART will enter into a comprehensive agreement with each local jurisdiction prior to commencement of construction. This agreement will identify all necessary permits, fees, etc. and special requirements regarding city facilities. City inspections may involve city streets or utilities being relocated, tied into or otherwise modified. City inspectors would not be asked or permitted to inspect the BART railroad facilities.

- 19.139. Can permit fees be collected by the affected agencies to off-set their inspection costs?

**Response.** Except for building permits, for which BART is exempt, cities and agencies can collect those inspection fees covered by existing ordinance, franchise agreements, etc. to meet the costs for such inspections.

- 19.140. Are agencies restricted in their ability to impose conditions on any permits issued to BART or their contractors? How will conflicts between permit restrictions and conditions of overlapping permits from different agencies be resolved? (Such as one agency requiring discharging into a storm drain while another agency requires the same discharge to be deposited into the sewer system.)

**Response.** Conflicting requirements of different permitting agencies would be negotiated and reconciled when agreements with the cities and agencies are prepared.

- 19.141. What agencies will be responsible for the inspection of the BART construction work?

- Grading?
- Buildings?
- Utilities?

- Paving and drainage?
- Site lighting?
- Landscaping?
- Irrigation?
- Retaining walls and structures?

**Response.** BART is responsible for the quality of the work performed by its contractors in accordance with the contract requirements. South San Francisco is responsible for defining the requirements for the construction of City facilities (streets, utilities) included in BART contracts. Costs associated with City inspections of City facilities would be borne by the City.

19.142. Can inspection fees be charged?

**Response.** Please refer to Response 19.139.

19.143. Will City services be required at overtime rates? What is the potential cost of these services?

**Response.** If a contractor has a need for inspection at other than the normal times covered in the ordinance, franchise agreements, etc., the contractor would have to make any special arrangements required and pay for them accordingly. Please also refer to Response 19.139 for a discussion of whether permit fees can be collected by affected agencies.

19.144. Will City Inspectors have to have special knowledge or training to perform their work? If so, how will this training be provided and paid for?

**Response.** Please refer to Response 19.141 for a discussion of City inspections of BART contractor work.

City inspections would involve only City streets or utilities being relocated, tied into, or otherwise modified. City inspectors would not be required to inspect BART facilities. The City is responsible for training its inspectors.

19.145. In order to provide the necessary inspections, will special equipment be needed? Specify the equipment that may be required, its cost and potential source of funding.

**Response.** Please refer to Response 19.144 for a discussion of City inspection of BART contractor work.

19.146. Potential Conflicts with Other Construction Projects Should Be Discussed and Potential Impacts Evaluated [such as:]

- City Public Works Projects
- Utility Company Work
- S.F.W.D. Water Main Relocations
- Nearby land development construction
- City Maintenance Work

**Response.** Future large projects, public or private, would be accompanied by their own environmental documentation, addressing mitigation of conflicts with the BART extension to the Airport if the BART project is still under construction. Conflicts with ongoing city maintenance activities would be mitigated at the time applications are filed by the contractor for access to or across public streets, or connections to existing utilities. Cumulative construction impacts are addressed at the end of each impact analysis in Section 3.13 of the FEIR/FEIS.

- 19.147. Impacts to Francisco Terrace Play Lot should be discussed. There will be noise, visual and safety impacts to the park due to the reconfiguration of South Spruce Avenue. The project proposed that this roadway be elevated approximately 10 feet, requiring an embankment along the park border. This park is currently very narrow and additional walls will seriously impact it by isolating it further from view and possibly creating an unsafe play area[a]. How will this impact be mitigated?

**Response.** Please refer to Response 19.16 for a discussion of South Spruce Avenue and the Francisco Terrace Play Lot.

- 19.148. The use of the right-of-ways at parkland is extremely important as very few opportunities to acquire new parkland exist in this City. This open space presents a unique opportunity for a recreational path that would run from one end of South San Francisco to the other and links the transit stations further down the line....Additionally, the document does not discuss impacts to the proposed Linear Park if the line were in a retained cut configuration....Aside from that, the following potential negative impacts would seriously impede efforts to develop a park, which need to be discussed: limited pedestrian access points due to security fencing and track lines; noise and vibrations; visual detraction of fencing and/or BART trench; liability/safety concerns due to proximity of pedestrians, youth, etc. to BART system improvements.

**Response.** Please refer to Response 19.17 regarding use of the BART right-of-way for a linear park. The impact assessment presented in the DEIR/SDEIS examines the effects of the project on existing conditions, not desired future conditions. A linear park does not exist nor is one planned. It is a possibility only because BART may traverse a portion of the City. For this reason, the EIR/EIS does not discuss impacts to the proposed linear park.

- 19.149.
- 1) The exit for the Mission Road Bus Stop and Kiss/Ride are offset from the Mission/Evergreen intersection. These existing lanes should be aligned directly opposite Evergreen Road to create a four-approach intersection with crosswalks and signals for vehicles and pedestrians....
  - 2) The flow of the Mission Road Bus Stop and Kiss/Ride should be south to north instead of north to south, to take advantage of the new four way intersection and traffic signal....
  - 3) Feeder bus service should arrive/depart via El Camino Real to the extent possible...only feeder bus routes serving areas east of the station site should use the Mission Street drop-off....
  - 4) Switch the proposed locations for the commercial development pad and the midday/handicapped parking lot along Mission Road, to remove the parking lot from the residential area....
  - 5) A bike path along the BART right-of-way is needed because Mission Road is not well designed to accommodate bicyclists. Pedestrian and bicycle connections should be included in concept plans of the BART alignment through the Hickey Station area, particularly to the adjacent residential developments and southeast to link with Kaiser Permanente....
  - 6) The garage could probably function adequately with two access points rather than three - one on the south side off the New Street, and one on the east side on Center Road (facing the station)....
  - 7) If the Center Road Kiss/Ride is kept in the location shown, people dropped off there may not use the crosswalks, but cut across the bus lane and bus bays to enter or leave the station....
  - 8) Provide an elevated walkway linking the second floor of the parking garage and the BART mezzanine, directly over the crosswalk shown. Adjacent to the garage elevators and stairs, it would be more convenient to three-quarters of all garage users, and significantly reduce at-grade pedestrian-vehicle conflicts....
  - 9) The midday parking capacity (100 spaces) on the El Camino Real side could be incorporated into the garage to create another pad for commercial development....

10) The Center Road/Hickey Extension intersection will not safely accommodate all movements for all vehicles. There would be conflicts between northbound right-turning cars and northbound left-turning buses because they would be coming out of exclusive lanes....

11) Access to the east-side bus bays off of Mission Road must incorporate adequate turn radii to accommodate full size transit buses....

12) The impact of the new proposed two-lane street between El Camino Real and Mission Road, southeast of the Hickey Station, (as shown in Figure 1, page 105, of the design appendix) is not discussed in the EIR. There is no discussion of the traffic control devices, intersection improvements, traffic channelization and location of intersecting streets and driveways along this new road.

**Response.** Specific responses to the commentor's numbered items are provided below.

1) It has been acknowledged that exiting lanes should be directly opposite Evergreen Road with crosswalks. The need for signals will be analyzed during preliminary engineering and final design.

2) Changing the flow direction for bus and kiss-and-ride would result in bus doors opening to the travel lane instead of the canopy/plaza area.

3) BART agrees with the proposed feeder bus arrival/departure strategy.

4) The midday parking lot, located to the north of the proposed parking garage, would be switched with the potential commercial development site, located at the proposed intersection of the Hickey Boulevard Extension and Mission Road. Though this revision differs from the requested change in the comment, the switch of these two parcels is based on further communications from the official representatives from the City of South San Francisco.

5) Please refer to Response 146.1 for a discussion of the bike path. BART will assist in coordinating long-term operational and maintenance issues with each city through which the bikeway passes.

6) The rule of thumb for parking garages is one access location per every 500 cars. Garage access will be analyzed during the preliminary engineering and final design phase.

7) A railing or other such barrier will be erected at the median to prevent pedestrian crossings at locations other than at the crosswalks. Pedestrians will be channeled toward a central crossing.

8) The only pedestrian-vehicle conflict would be with Kiss-and-Ride traffic. The volume of Kiss-and-Ride traffic is not large enough to justify the costs of constructing a bridge and any associated vertical circulation (stair and elevator).

9) Provision of at-grade midday parking along El Camino Real is not critical to transportation functions. The extent of this site for future development would be finalized during preliminary engineering and final design.

10) The median in the Center Road at the Hickey Station has been modified to allow vehicles to change lanes south of the intersection with the Hickey Boulevard Extension. Removing the median divider on Center Road just south of the Hickey Boulevard Extension would allow northbound vehicles turning left to move into the left turn lane before they reach the intersection (see Volume IV, Design Appendix, of this FEIR/FEIS).

11) Adequate turn radii will be provided during the design process.

12) The level of service (LOS) impacts of the proposed Mission/New Street and El Camino Real/New Street intersections are presented in Appendix C of the DEIR/Technical Appendix. The level of service at the proposed intersection of Mission/New Street would be LOS C during the A.M. peak hour and LOS D during the P.M. peak hour in 2010 under Alternative VI and the Alternative VI Aerial Design Option. The level of service at the proposed intersection of El Camino Real/New Street would be LOS A during both the A.M. peak hour and P.M. peak hour in 2010 under Alternative VI and the Alternative VI Aerial Design Option. The intersection of Mission/New Street was designed with all-way stop sign controls with two eastbound lanes and two westbound lanes on New Street, along with a southbound left-turn-only lane and three

southbound through lanes on El Camino Real, plus one northbound combined right turn/through lane and two northbound through-only lanes on El Camino Real. More specific traffic channelization would be determined during preliminary engineering and final design phases.

- 19.150. SSF Alternative Proposal - This proposal [summarized below] is designed to focus station activity on El Camino Real, away from the Sunshine Garden neighborhood, and to remove internal circulation conflicts between autos, pedestrians, bicyclists, and buses.

- Delete north - south road through site.
- Relocate northbound bus stops and kiss n' ride to El Camino Real.
- Provide tower element for focus at station.
- Include landscaped plaza with garage planning and construction. Align plaza axis with tower at station.
- Expand the area for private development.
- Expand garage toward station.
- Use both areas for midday/disabled parking.
- Provide bridge or covered entry from garage to station.
- Use elevator towers as focal point elements.

**Response.** The station plans in the Design Appendix (pages 105-138) are schematic and intended to indicate the general disposition of the station features. Most issues of concern to the City of South San Francisco can be addressed within the general framework of the these plans without creating new impacts. Suggestions for providing a tower element for focus, providing elevator towers as focal point elements, articulating the garage facade, landscaping, etc., will be considered as part of the preliminary engineering and final design phase. Community and agency input will be incorporated during this process.

However, those elements that would compromise the basic station internal circulation plan, garage access, ingress, and egress are not feasible. The north/south road through the station site cannot be deleted as it is essential for bus circulation; the northbound bus stops and kiss-and-ride to El Camino Real cannot be relocated for similar reasons. Landscaped plaza with garage planning and construction may be possible and will be considered during preliminary engineering and final design, as long as it does not compromise the final circulation plan. The garage cannot be expanded towards the station, because it would adversely affect the internal circulation patterns. Midday/disabled parking will be provided consistent with ADA requirements

The other suggestions are not feasible for the following reasons:

- BART acquires right-of-way as needed for its project, parking, and access. Any leftover property will be available for private development under the city's permit procedures.
- A bridge will not be provided from the garage to the station, as adequate circulation is provided at the ground level. Security and maintenance and circulation considerations make this suggestion unfeasible.

- 19.151. Modified BART Proposal - This proposal works within the basic framework of the plans included in the DEIR, but addresses major issues regarding traffic conflicts and design.

- Provide tower element for focus at station.
- Include landscaped plaza with garage planning and construction. Align plaza axis with tower at station.
- Reduce width of garage to allow for plaza.
- Study ways of articulating garage facade.
- Explore the potential of expanding the garage by bridging over the roadway.
- Expand future potential commercial development parcel to include proposed surface parking.
- Provide planting along facade of garage and potential development parcel boundary.
- Provide consistent street tree pattern at Mission Road.
- Design garage for future additional level.

**Response.** FTA regulations do not permit use of federal funds for future expansion of facilities. The parking garage has been sized to meet the capacity requirements established in the environmental document. If the City or some other entity were willing to provide funding to BART to modify the structure of the garage to later accommodate a parking deck, the project could accommodate this requirement. Please refer to Responses 19.149 and 19.150 regarding station plans.

- 19.152. The sources of the project funding need to be updated and clarified. The information in Table 6-4 does not reflect current discussions on amounts and sources of funding. The report should clarify current discussion with BART staff which indicate the funding scenario does not entail a financial commitment from the City of South San Francisco.

**Response.** Please refer to Volume I of the FEIS/FEIR for a discussion of the updated financial plan. Please refer to Response 19.21 for a discussion of the role of cities in funding the project, and to Response 14.93 for a discussion of the financial plan included in the DEIR/SDEIS.

- 19.153. Additionally, the DEIR assumes the Colma-SFO extension is to open as a single project. However, our understanding is that the funding is to be provided in increments, leading to a concern over whether there will be sufficient funds to complete the project. Have contingency plans been developed to address this possibility? The City is very concerned that the South San Francisco station not become an end of the line station due to the severe impacts upon parking, traffic, circulation, etc., which would result.

**Response.** Please refer to Response 19.22 for discussion on incremental funding of the project.

- 19.154. There appears to be no discussion of what permits from State and local agencies will be required to commence the construction of the BART project. These permits should be listed by jurisdiction and their significance discussed.

**Response.** Table 1-3 on page 1-11 of the DEIR/SDEIS lists the agencies with permitting authority. Both BART and the BART contractors would contact these agencies for the permits required by law.

- 19.155. What opportunity will the City have to review, comment on and approve the project design and construction plans? This should be discussed.

**Response.** As noted on page 3.2-35 of the DEIR/Technical Appendix, BART is exempt from local zoning laws, but cooperates with cities as a matter of practice. The City of South San Francisco will be asked to review and comment on drawings of new connections to existing City streets and utilities.

- 19.156. There should be a discussion of how the maintenance responsibilities will be shared between the City forces and the BART maintenance staff. Such improvements as roads, sewers, storm drains, traffic signal, lighting, pedestrian walks, landscaping, irrigation and similar facilities constructed or reconstructed by BART will need to be clearly defined as to maintenance and ownership obligations. If this is not accomplished, the improvements may not be properly maintained and liability and service problems may develop.

**Response.** All connections to existing utilities or roads and all relocated or new utilities and roads will be negotiated between the cities or utility owners and BART as part of the agreements between these parties. Similarly, these agreements will include the maintenance and operational responsibilities for each of these areas.

19.157. The new improvements and areas of maintenance responsibilities identified in the EIR (per the previous comment) will have a direct impact on the City's Public Works staff and our future operation and maintenance budgets. This impact on the City's Public Works services was not evaluated in the EIR and needs to be discussed - and if appropriate, mitigated.

**Response.** Please refer to Response 19.156. As noted in the previous comment, BART will negotiate with cities or utility owners regarding the operations and maintenance of public infrastructure. BART will provide and pay for maintenance service of its own facilities. Newly constructed facilities that become the responsibility of the city, pursuant to the negotiations between BART and the city, are a separate fiscal matter. Costs for increased staffing and administration are not reimbursed by BART.

19.158. Sanitary sewers and storm drains, whether existing or new must continue to gravity drain across the BART right-of-way. If pumps or siphons are needed to convey these fluids under or over the BART improvements, significant maintenance and operation costs would be incurred by the City Public Works Department to operate, maintain, repair and replace these facilities. These costs would be permanent and should be analyzed and discussed.

**Response.** At the present time, there are no plans for new pumps or siphons to be installed in the existing storm and sanitary sewer systems. If a need for pumping stations or siphons is identified, as the design progresses, the maintenance and operation costs and agreements would be negotiated between BART and the utility owner to their mutual satisfaction.

19.159. In order to make the final EIR document less burdensome upon its approval, it is recommended that all of the project mitigation measures identified in the EIR review process be summarized and organized in a separate booklet that can be conveniently referred to during the design and construction of the BART extension.

**Response.** The adopted list of mitigation measures from the final environmental document will be organized in a separate document. This document, the Mitigation Monitoring and Reporting Plan (MMRP), will be prepared pursuant to State of California AB 3180, which calls for project proponents to do precisely what the commenter has requested. AB 3180 requires project proponents to develop mechanisms to track the implementation and effectiveness of mitigation measures adopted to minimize project impacts. For each mitigation measure, the MMRP will identify the entity responsible for implementation and any required monitoring actions.

19.160. The final EIR should also include a method of tracking all of the identified mitigation measures to insure that they are not overlooked during the design, construction and operation of the BART Extension project.

**Response.** Please refer to Response 19.159 for the method which will be used to track implementation of adopted mitigation measures.

19.161. Page 3.1-28 - [Mitigation Measure] 14 [of the Summary DEIR/SDEIS] indicates that CCTV and patrols will be employed in the Tanforan station parking structure. Will these be standard conditions for all BART parking lots at each station?

**Response.** Please refer to Response 17.51 for a discussion of the CCTV in the Tanforan station parking structure. The Tanforan station is a unique case and CCTV will not be provided at all stations on the system.

19.162. Page 3.1-29 [of the Summary DEIR/SDEIS] - Who will BART utilize for tow services and storage for vehicles towed from their property?

**Response.** Contracting for tow services and storage of vehicles towed from BART property would be conducted consistent with BART policy for contracting out for services and would be done when the stations are ready to open.

- 19.163. Page 3.13-7, [Mitigation Measure] 1.1 - The traffic management plan should include a process to have BART contractors responsible for receiving training and providing traffic direction and control during construction so no burden on local police agencies to provide such service would be necessary.

**Response.** The traffic management plan will be included with the construction plan and will include the process by which BART contractors would be responsible for providing traffic direction and control during construction; local police agencies will not be required to provide such service.

- 19.164. Page 6-13 [of the Summary DEIR/SDEIS] - A project specific revenue source considered in this [Financial Analysis] section is to institute parking charges for San Mateo County BART stations; this would exacerbate potential spillover parking problems and should be avoided.

**Response.** Parking charges may be imposed at the San Mateo County BART Stations. See also Response 14.38 for a discussion of spillover parking. Spillover parking would be monitored at all BART extension stations and, if found to be a problem, mitigation measures would be implemented, including a Residential Permit Program by the City and restricted time zones for parking. Public hearings would be conducted by the SamTrans Board of Directors before implementing parking fees at these BART stations.

- 19.165. Chapter 8 - Community Participation - Includes no reference or process for interaction by BART station security/safety design planners interacting with local staff in similar positions to assure the best design and staffing decisions are made on each community's BART station.

**Response.** BART intends to incorporate input from the affected cities and public into final design of the extension stations. In addition, BART staff is working closely with staff from the affected cities to address their concerns and will continue to do so through the duration of the planning and construction phases.

## **20. CITY OF SOUTH SAN FRANCISCO OFFICE OF THE HISTORIC PRESERVATION COMMISSION**

- 20.1. This letter is to express this Commission's interest in being included in anticipated discussions on the disposition of the arched cut-stone bridge located on the right-of-way for the BART/SFO extension.

**Response.** BART has contacted the City of South San Francisco Office of the Historic Preservation Commission to explore all alternatives regarding the cut stone bridge and mitigation for adverse effects ?. Please also refer to Response 19.79 above.

## **21. MILLBRAE SCHOOL DISTRICT**

- 21.1. The increased traffic resulting from BART access and/or a multi-modular station will make street crossing increasingly dangerous, especially for children at San Antonio Avenue, Santa Helena Avenue, Murchison Drive, Center Street, El Camino Real, Hillcrest Boulevard, and other major traffic arteries....The Millbrae School District requests that BART provides crossing guards at all major intersections on a regular basis [and]...a pedestrian overpass or passage below any BART pathway that would otherwise [require] children to cross at its level or in any dangerous course.

**Response.** As discussed in Section 3.1 and shown in Appendix C of the DEIR/Technical Appendix, the forecasted increase in traffic on these streets varies widely by alternative. In general, most of the added traffic burden caused by an end-of-the-line station in Millbrae would be borne by Highway 101 mainline segments and ramps serving that station. In the case of the Alternative VI LPA and the Aerial Design Option LPA, the impacted area also includes Millbrae Avenue from Rollins to the Millbrae Avenue Interchange. The other streets listed in the comment would primarily serve local traffic, and, in some cases, drivers may change their route to access a BART station. Diversion of traffic due to roadway improvements, (such as the Hickey Extension), or to vehicles accessing BART stations would increase traffic volumes on segments of El Camino Real and decrease traffic volumes on other segments. Traffic on Center Street would increase under Alternatives IV and V and the street would be widened to increase capacity. An all-way stop control proposed for the intersection of San Anselmo/Center will assist in pedestrian crossing. San Antonio Avenue would be impacted only under the Base Case Alternative that would allow BART patrons to be dropped off along San Antonio Avenue to access the BART station from the west. Most kiss-and-ride patrons and all park-and-ride patrons would access the BART station from Highway 101 or from Center Street. The traffic model estimated that less than five percent of the kiss-and-ride patrons (approximately 10 vehicles) would access the station from the west side in the A.M. or P.M. peak hours. The other streets listed in the comment, including Santa Helena, Murchison Drive and Hillcrest, will not carry significant volumes of traffic.

Construction sites will be fenced, and inaccessible to children at all times. Crossing guards will be provided at important intersections as required by construction activities. BART cannot provide specific city services such as crossing guards unless specifically required for construction activities. Safe pedestrian passage will be provided at the cross streets to the BART alignment during construction of the BART-San Francisco Airport Extension.

21.2. The physical barriers created by the proposed transit routes have the potential for establishing the greater Lomita Park area, including Center Street and Bayside Manor, as an environment isolating a minority population apart from the general community....The Millbrae School District requests that BART facilities and access routes be planned to minimize the impact on the school community, particularly the identified areas and their isolation from the remainder of the City of Millbrae.

**Response.** Because these neighborhoods were designed with limited-access cul de sacs and are already somewhat separated from the rest of Millbrae, the BART extension would not significantly increase their isolation.

21.3. [Inadequate parking for BART workers will result in] creation of a BART parking area in the Lomita Park community....The Millbrae School District requests that BART workers not park in the school community.

**Response.** No parking by construction site employees or visitors will be permitted on school property. Please refer to Response 22.17 for a discussion of BART construction worker parking. Please refer to Responses 14.25 and 14.38 for a discussion of monitoring and mitigation of spillover parking into local streets.

21.4. Displacement of families living in the Millbrae School District's school community and attending the District's schools will cause a loss to the District of its average daily attendance apportionment of approximately \$3,600 per student and an additional \$1,500 in categorical income. Such displacement may be attributed to the removal of homes to make way for BART and its associated needs, or to families due to the proximity of transit improvements....The Millbrae School District requests that BART enter into an agreement to have a phased settlement over five years for the loss of revenue and programs as a result of BART's construction activities. The District proposes that in the second of the five years, the District would receive the demonstrated base revenue that it would have lost, and in the three subsequent years, that the financial support be reduced by 25 percent for the next three years.

**Response.** Please refer to Response 16.34 for discussion of reduced student enrollment and BART's role in restoring lost revenues.

- 21.5. When the receiving schools reach capacity, there will be need for additional classroom space and other resources. For several of the alternatives, the operation of Lomita Park School needs to be reviewed by the State Department of Education and the State Office of Local Assistance in that the site may be deemed inappropriate for education due to safety and other factors....The Millbrae School District requests that BART fund a facilities investigation and report to be made jointly by the State Department of Education and the State Office of Local Assistance, and the Millbrae School District. Based upon the report's determination, if Lomita Park School is no longer viable as an educational site, the District requests that BART enter into an agreement to provide for fiscal relief in the reorganization of the District and possible relocation of the school, whether new construction or reopening of a closed school, or possible expansion of the other school sites and realignment of resources. The District also requests that BART negotiate a multi-year settlement to minimize the overall trauma to the students and staff of the District, including funding for District transportation, if necessary.

**Response.** A final decision on alignment and grade has not been made, but it seems unlikely that proximity to BART would create a safety hazard for Lomita Park School. Unlike CalTrain, which operates in proximity to the school, the BART alignment is always inaccessible to pedestrians. Please refer to Response 16.34 for a discussion of student displacement.

- 21.6. Reductions in the significant number of students in any school will result in staff layoff done in accordance with education code and employee contractual agreements....The Millbrae School District requests that BART enter into a mutual investigation of overall fiscal impacts on the District and negotiate a multi-year settlement designed to minimize overall trauma to the students and staff of the District.

**Response.** Please refer to Response 16.34 for a discussion of financial assistance to compensate the District for loss of students.

- 21.7. Displacement of the families living in the impacted school neighborhoods and attending Millbrae School District schools will cause permanent loss to the District of its average daily attendance, a basic apportionment of approximately \$3,600 per student and an additional \$1,500 to \$1,800 per student for additional categorical funding....The Millbrae School District requests that BART enter a mutual investigation of overall fiscal impacts. The District requests that BART provide the necessary funds for a five-year facility management report to be prepared by the State Department of Education, the State Office of Local Assistance, and the Millbrae School District which would detail the liability [of] the District school facilities relative to the proposed BART construction. The Millbrae School District requests that BART enter into an agreement to have a phased settlement over five years of the loss of revenue and programs as a result of BART's construction activities. The District proposes that in the second of the five years, the District would receive the demonstrated base revenue that it would have lost, and in the three subsequent years, that the financial support be reduced by 25 percent each year.

**Response.** Please refer to Response 16.34 for a discussion of financial assistance to compensate District for student displacement.

- 21.8. The District foresees the need for possible realignment and reorganization of its schools [and] requests that BART enter a mutual investigation of overall fiscal impacts on the District and negotiate a multi-year settlement designed to minimize [the trauma] to the students and staff of the District. The Millbrae School District requests that any route selection resulting in an enrollment decrease or increase of more than 20 percent of any school would trigger BART to mitigate the relocation of reorganization of the affected school areas.

**Response.** Please refer to Response 16.34 for a discussion of financial assistance to compensate the District for loss of students.

21.9. The equipment for heavy and sometimes for even light construction is noisy by nature. Further, workers and the increased traffic in the construction areas create increased noise....The Millbrae School District requests that BART designs [1]) incorporate approaches which inhibit any noise that might interfere with the instruction at Lomita Park School to the greatest degree possible, [2]) utilize sound barriers whenever possible to inhibit noise that interferes with instruction, [3]) perform any high noise construction which interferes with instruction outside of regular school hours, [4]) route noisy construction traffic away from schools during regular school hours, [and 5]) take any other necessary and appropriate steps available to prevent noise from interfering with instruction, not only during the period of construction but on a permanent basis, specifically at Lomita Park School.

**Response.** Belle Air Elementary School would be affected by construction noise under the 1992 LPA, its Least-Cost Design Option, and Lomita Park School would be affected by the Aerial Design Option LPA. If any of these were the adopted build alternative, the schools would be considered a "special zone," as defined in the BART Extensions Program Design Criteria, Volume I, Appendix A. BART would work with the local school district to establish appropriate noise limits and/or possible working time restrictions for construction work that would be performed in the vicinity of these schools. Such "special zone" noise limits and time restrictions would become part of the construction contract. Environmental monitoring of construction noise in the vicinity of either school would use such noise limits and time restrictions as the criteria for compliance.

21.10. The close proximity of students living in the Lomita Park area creates the potential for hazard from heavy and light equipment both when such equipment is being used and when it is being stored between uses. Equipment use creates a fascinating attraction particularly for small children and equipment storage is an attractive nuisance....The Millbrae School District requests that BART [1]) provide for the secure areas of equipment storage when it is not in use, [2]) provide for safe supervision, keeping students at bay when equipment is in use, [and 3]) provide for education of students and parents regarding the danger of said equipment.

**Response.** To preclude unauthorized entry, vandalism, and potential safety risks, BART contractors, as part of their routine construction procedures, will install fences around its construction sites and laydown and mobilization areas. In addition, the DEIR/Technical Appendix on page 3.13-32 provides a mitigation measure to address safety hazards near elementary schools. BART will provide traffic controls during school hours, with the specifics to be worked out with local jurisdictions. Finally, Mitigation Measure 3.1, Coordination with Cities and Communities, on page 3.13-54 of the DEIR/Technical Appendix, requires that BART coordinate with cities and neighborhoods in the formulation of construction plans to minimize construction impacts on neighborhoods and schools. The measure specifically mentions a public information program to alert residents and businesses. Other measures, including those identified by the Millbrae School District, can be proposed and discussed with BART during the construction planning process.

BART Specifications Standards require contractors to take the following steps to protect the general public:

Protecting the General Public. A.) The contractor shall take the necessary steps to prevent injury to civilians, pedestrians, and damage to public property. The public shall be considered as any persons not employed by the contractor or its subcontractors. B.) Work shall be performed outside of the designated work area only when specifically stated in the Contract Documents or specifically permitted in writing by the District. C.) Necessary steps shall be taken to protect and maintain work areas that interface with public sidewalks, building entrances (lobbies, corridors and aisles), stairways and roadways. Appropriate barricades, fences, guardrails, overhead protection, partitions, shields and adequate visibility shall be provided. Protection against any other harmful exposure shall also be provided. D.) All

travel ways, access, and egress points shall be maintained and clear of obstructions at all times. E.) Warning signs shall be conspicuously positioned and a flag person shall be assigned when contractor's equipment may be encountered by pedestrians or vehicles. F.) Overhead protection shall be provided in accordance with the laws of the jurisdiction where the project resides. G.) Laydown areas shall be secured by fences, security system, watchpersons, or other means approved by the District. The work site shall be fenced or secured as indicated. H.) Barricades for the general public or public roadways shall be secured against accidental displacement and shall be in place at all times, except when temporary removal is required. At such times, a watchperson shall be assigned to control the unprotected area.

These provisions serve BART well and will suffice for construction of the proposed BART Extension. It should be noted that BART cannot enforce conditions which are beyond the limits of the project onto any contractor.

- 21.11. With the addition of BART multi-modular stations, as well as parking and access, comes an increase in adult population from outside the area....The Millbrae School District requests that BART [1]] provide for appropriate education of students and parents regarding the dangers associated with the advances by unwelcome strangers, [2]] provide for appropriate security for the Lomita Park neighborhood and adjacent areas, [and 3]] clearly defines school site parking as unavailable for any BART use either by fencing or patrolling the area as necessary.

**Response.** The analysis of traffic impacts for the study area, including in the City of Millbrae, has investigated reductions in the levels of service at local intersections due to the proposed BART stations. Any significant deteriorations in the level of service at intersections in Millbrae have proposed mitigations to improve the level of service to an acceptable level. Please refer to Response 21.1 for a discussion of traffic on specific streets listed by the Millbrae School District as potential impediments to students traveling to school. Please refer to Response 21.10 regarding safety measures to be incorporated during the construction period.

BART will cooperate with the school in providing information on construction sites and safety. BART will not provide security to entire neighborhoods or adjacent areas since this is not required by the construction activity, and is beyond the scope of the project. No parking on school property will be permitted by construction site employees or visitors. Please refer to Response 14.25 for a discussion of spillover parking.

- 21.12. With increased traffic in the residential areas, including the already high traffic roadways such as San Antonio Avenue, Santa Helena Avenue, Murchison Drive, El Camino Real, and Hillcrest Boulevard, significant hazards will be increased for children crossing streets....The Millbrae School District requests that BART, in cooperation with school officials, implement an ongoing safety education program for students.

**Response.** As discussed in Response 21.1, BART-related increase in traffic during operation does not warrant BART-sponsored safety education programs. Please refer also to Responses 21.10 and 21.14 regarding safety measures to be incorporated during the construction period.

- 21.13. The increased traffic in residential areas, as well as the normally high traffic roadways such as San Antonio Avenue, Santo Helena Avenue, Murchison Drive, El Camino Real, and Hillcrest Boulevard will create significant impediments to students attempting to travel to and from school in a timely manner....The Millbrae School District requests that BART designs incorporate traffic patterns, traffic control procedures, and traffic safety stops which will promote timely travel for students to and from school.

**Response.** Please refer to Response 21.1 for discussion of impacts to local streets and their proposed mitigation.

- 21.14. During BART construction, the heavy equipment and increased traffic and associated increases in strangers in the Lomita Park area will create a significant need among parents for enhanced and informed awareness of appropriate safety procedures....The Millbrae School District requests that BART, in cooperation with school officials, implement an ongoing safety education program for parents.

**Response.** BART/SamTrans is committed to assist local governments, community organizations and schools maintain quality community and educational services. To this end BART's good neighbor policy is committed to provide community out-reach services, such as school safety instruction programs, and access and safety instruction for the disabled. Such programs are conducted through BART's Community Relations, Safety, and Police Departments. Additionally, BART will work with school and community officials to maintain and coordinate access to and from schools during construction of the proposed project.

- 21.15. The diversion of traffic into new routes while construction takes place is guaranteed to create significant hazards for children....The Millbrae School District requests that BART provide additional traffic guards and any other necessary safeguards or procedures at all impact intersections for appropriate periods before and after school on a daily basis throughout the construction.

**Response.** The traffic management plan for construction activities would include control of traffic in the vicinity of construction. Precautions would be taken to provide necessary safeguards for school crossing areas at all impacted intersections during the appropriate periods of every school day. Please refer to Response 21.10 for a discussion of construction-related safety measures. Please also refer to Response 21.14 for a discussion of BART's commitment to maintaining quality community and educational services.

- 21.16. Digging and moving dirt for BART construction in any proximity to Lomita Park School are certain to increase dust and dirt inside Lomita Park School which will not only affect the cleanliness of the school but has the potential of affecting the air and the overall school environment....The Millbrae School District requests that BART take any available and appropriate steps necessary to prevent dust and dirt in the Lomita Park School [and] that when BART is responsible for dirt and dust in the school, it will take immediate steps for removal.

**Response.** The air quality impacts of construction activities and proposed mitigations are discussed on pages 3.13-197 to 3.13-206 of the DEIR/Technical Appendix. Please also refer to Response 19.134 for a discussion of the measures that will be implemented to minimize the amount of particulate matter generated during construction.

## 22. SAN BRUNO PARK SCHOOL DISTRICT

- 22.1. The increased traffic resulting from BART access and/or a bi- or multi-modal station will make the street crossings at Angus, San Mateo, and San Bruno Avenues and other major traffic arteries increasingly dangerous for children [of the] San Bruno Park School District....The District requests that BART provide crossing guards at all major intersections on a regular basis....that BART provide a pedestrian overpass or passage below any BART pathway that otherwise would require children to cross at its level or in any otherwise dangerous course...that BART provide for the safe and prompt delivery and pick-up of students, including maintenance of the integrity of SamTrans services...[and] that BART make every effort to maintain full traffic access to and through key intersections...that, if necessary to maximize the safety of students, SamTrans pick-up areas be adjusted away from construction and heavy traffic areas.

**Response.** As discussed in Section 3.1 and shown in Appendix C of the DEIR/Technical Appendix, the forecasted increase in traffic during BART operations on these streets varies by alternative. The streets listed would primarily serve local traffic and, in some cases, drivers may change their route to access a BART station. The increase in traffic on Angus, San Mateo and San

Bruno Avenues would be greatest if either the I-380 San Bruno Station or Downtown San Bruno Station option is selected under Alternatives IV or V as well as Design Options V-A or V-B. In this case, San Bruno Avenue would have to be widened and the intersection of Huntington/San Mateo signalized. Angus Avenue would not be significantly impacted under any of the Alternatives.

Construction sites will be fenced, and inaccessible to children at all times. Crossing guards will be provided at important intersections as required by construction activities. BART cannot provide specific city services such as crossing guards unless specifically associated with construction activities. Pedestrian passage will be provided at the cross streets to the BART alignment during construction of the BART-San Francisco Airport Extension.

SamTrans remains committed to providing the same level of bus service to areas near the construction project as is now available. Bus routes and boarding locations would only be altered when required during construction, and these instances would not be known until late stages of engineering on the BART Extension are completed.

Please also refer to 21.15 for a discussion of construction site safety.

- 22.2. The physical barriers created by the proposed transit routes...have the potential for establishing the Belle Air School community as an environment isolating a minority population apart from the general community....The District requests that BART facilities and access patterns be planned to minimize impacts on the school community, particularly isolation from the remainder of the city...that BART compensate it for a study done to determine the impacts of BART on segregation of minority children in the schools and community; further, the District requests that BART compensate it for any necessary desegregation...[and] that BART maintain the integrity of the Belle Air and Lion's Fields. Any unavoidable changes should result in relocation, not diminished capacity.

**Response.** BART facilities and alignments are planned to minimize impacts on school communities. As discussed in the DEIR/SDEIS, social impacts in the Belle Air School community may be significant. Extensive studies and analyses of impacts relating to the extension project have previously been prepared. No further studies in the areas suggested by the commentor are planned. Please also refer to Response 16.34 for a discussion of displacement impacts within school districts. Please refer to Response 17.56 for a discussion of impacts on the minority population of San Bruno.

- 22.3. Displacement of families living in the [San Bruno Park School] District's school communities and attending the District's schools will cause a permanent loss to the District of its Average Daily Attendance (ADA) apportionment of approximately \$3180.00 per student....The District requests that BART compensate it for a facilities study to determine whether the impacts of the selected alternative will necessitate district reconfiguration; the District further requests that BART compensate it for any district reconfiguration and/or relocation found necessary by the study...[and] that BART reimburse the District for any loss of revenue caused by loss of students east of El Camino Avenue, using the 1995 Second Period Report of Attendance as baseline data, and that said payments be made for a period of five years, commencing one year after construction is initiated.

**Response.** Please refer to Response 16.34 for a discussion of displacement of students.

- 22.4. Once BART has selected its route and completed its construction, the District will be left with a multitude of anticipated and unanticipated problems...The District requests that any route selection resulting in a decrease in enrollment of more than 20 percent at Belle Air School trigger a BART offer to mitigate by relocation of Belle Air School at the expense of BART...[and] that BART reimburse the District for any loss of revenue caused by loss of students east of El Camino

Avenue, using the 1995 Second Period Report of Attendance as baseline data, and that said payments be made for a period of five years, commencing one year after construction is initiated.

**Response.** Please refer to Response 16.34 for a discussion of compensation for loss of school district revenue.

- 22.5. Any BART station, trains, or tracks which either detract from the appearance of the school community or, in the case of aerial construction, separate the school community from the rest of the city will significantly contribute to labeling the school community as a less desirable neighborhood....The District requests that BART construction detracting from the appearance of the school community be minimized to the greatest degree possible [and] that BART facilities be designed to contribute to the socioeconomic status of the community to the greatest degree possible.

**Response.** The DEIR/Technical Appendix describes impacts to neighborhoods in Section 3.2, Land Use, and in Section 3.3, Visual Quality. Under the proposed project, the alignment would run below grade just east of the Belle Air School and would not result in visual impacts to the school. The Parkside Intermediate School located on Niles Avenue west of El Camino Real would not be visually affected by a BART alignment because of its distance from the right-of-way (approximately one mile). The aerial portion of the Base Case Alternative through San Bruno is acknowledged to create significant impacts for sensitive receptors and to physically divide the community. The impact of the visual separation resulting from the aerial alignment cannot be fully mitigated. The location of the Downtown San Bruno Station under Alternative V and Design Option V-A would be two blocks from the Belle Air School on 3rd Avenue. Both the station and the parking structure are noted to visually detract from the Belle Air neighborhood. During the final design phase, feasible mitigation measures will be determined from the recommended measures. The alignment south of San Bruno Avenue under Alternative VI would run below grade and therefore not significantly affect the visual setting of schools in the San Bruno Park School District.

- 22.6. All available fields are scheduled to their maximum capacities, and the potential for growth for these programs has already been severely curtailed due to the limited number of playing fields available. The District requests that BART maintain the integrity of the Belle Air and Lion's Fields. Any unavoidable changes should result in relocation, not diminished capacity. Such relocation should not result in a reduction of the overall number of or capacity of available fields in the community.

**Response.** The Belle Air Elementary School would be impacted by the 1992 LPA and its least cost design option due to the proximity of construction, and by the Aerial Design Option LPA due to the proximity of construction traffic to and from U.S. 101 under the Aerial Design Option LPA. BART has requested, and Caltrans has indicated that they will grant, a special permit whereby construction traffic can access the Bayshore Highway from a newly constructed temporary construction road across vacant lands west of Bayshore, opposite the San Francisco International Airport. Construction traffic trying to reach Bayshore by local streets and interchanges would be diverted to this construction accessway. The Lomita Park School is a special noise-sensitive receptor. Interference with the education process because of noise would have adverse consequences. As such, the school would be considered a special zone and noise limits that would minimize interference with the learning process would be adopted by BART for any adopted build alternative if it were near the school. Temporary sound barriers would be employed as noise mitigation.

- 22.7. The increased traffic and the increased numbers of pedestrians create increased noise. The District requests that BART design incorporate approaches which inhibit any noises that might interfere with instruction in schools to the greatest degree possible...that BART utilize sound barriers wherever possible to inhibit noises that interfere with instruction...that BART route noisy traffic

away from schools during regular school hours...[and] that BART take any other necessary and appropriate steps available to prevent noise from interfering with instruction.

**Response.** BART can and would mitigate transit train noise and construction noise that might interfere with instruction in the schools that would be affected by the proposed project. The appropriate noise limits are indicated in the DEIR/Technical Appendix in Table 3.9-2 (train noise) and Tables 3.13-11, -12 and -13 (construction). Appropriate noise mitigation would be developed using these noise limits. However, BART has no control over local traffic nor the flow of pedestrians (note that pedestrians are not a significant source of noise). Haul routes during construction would be coordinated with cities with the intent of avoiding noise sensitive areas such as schools. Where necessary, temporary noise barriers would be installed to shield schools from construction noise. Please refer to Response 21.9 for a discussion of impacts to local schools.

- 22.8. The presence of and storage of BART equipment creates attractive nuisances for children....The District requests that BART provide for the tight security of equipment storage areas on a continual basis.

**Response.** Please refer to Response 21.10 regarding safety measures to be incorporated during construction period.

- 22.9. With the addition of BART parking and access and/or bi- or multi-modal stations come the increased adult populations from outside the area. Further complicating the situation is the potential for people to attempt to utilize school site parking when BART parking is full, meaning increased numbers of strangers will be in closer proximity to schools....The District requests that BART provide for the appropriate education of students and parents regarding the dangers associated with advances by unwelcome strangers...[and] that BART provide appropriate security for the neighborhood and adjacent areas...that BART clearly defines school site parking as unavailable for BART users, fencing or patrolling it if necessary.

**Response.** Please refer to Responses 21.3 and 22.17, which generally address BART-related parking. Please also refer to Responses 21.10 and 21.11 for further details regarding construction safety.

- 22.10. The increased traffic in both the residential areas as well as the normally high traffic roadways such as El Camino and San Bruno Avenue will create significant hazards for children crossing streets....The District requests that BART, in cooperation with school officials, implement an ongoing Safety Education Program for students.

**Response.** BART will cooperate with school officials in implementing a Safety Education Program during construction. Please refer to Responses 21.10 and 22.1 for a discussion of the differences among alternatives in forecasted traffic increases during BART operations, and for a discussion of construction period safety. Please refer to Response 21.14 for additional discussion of educational programs.

- 22.11. The increased traffic...will create significant impediments to students attempting to travel to and from school in a timely manner....The District requests that BART designs incorporate traffic patterns, traffic control procedures, and traffic safety staff which will promote timely travel of students to and from school.

**Response.** The analysis of traffic impacts for the study area, including in the City of San Bruno, has investigated reductions in the levels of service at local intersections due to the proposed BART stations. Any significant deteriorations in the level of service at intersections in San Bruno have proposed mitigations to improve the level of service to an acceptable level. Please refer to Response 22.1 for a discussion of traffic on specific streets listed by the San Bruno Park School District as potential impediments to students traveling to school.

22.12. During construction the use of heavy and light equipment, the increased traffic, and the associated increases in strangers in the area will create a significant need among students for enhanced and informed awareness of appropriate safety procedures....The District requests that BART, in cooperation with school officials, implement an ongoing Safety Education Program for students.

**Response.** Please refer to Response 21.10 regarding safety measures to be incorporated during the construction period.

22.13. During construction the use of heavy and light equipment, the increased traffic, and the associated increases in strangers in the area will create a significant need among parents for enhanced and informed awareness of appropriate safety procedures. The diversion of traffic into new routes as construction takes place is guaranteed to create significant safety hazards for children as well as impede students on their way to and from school....The District requests that BART, in cooperation with school officials, implement an ongoing Safety Education Program for parents.

**Response.** Please refer to Response 21.10 regarding safety measures to be incorporated during the construction period.

22.14. The location of BART routes too close to a school has the potential for tremendous safety problems for students....The District requests that BART not develop any lay-down areas which impinge upon the play areas of its students.

**Response.** Please refer to Response 22.31 for a discussion of laydown areas near schools, and Response 21.10 regarding safety measures to be incorporated during the construction period.

22.15. The diversion of traffic into new routes as construction takes place is guaranteed to create significant safety hazards for children....The District requests that BART provide additional traffic guards and any other necessary safeguards or procedures at all impacted intersections for appropriate periods before and after school on a daily basis throughout construction....that BART provide for the safe and prompt delivery and pick-up of students, including maintenance of the integrity of SamTrans services...that, if necessary to maximize the safety of students, SamTrans pick-up areas be adjusted away from construction and heavy traffic areas....that BART provide adequate traffic planning for adequate entrance and egress for Belle Air School, resulting in the safe and efficient delivery and pick-up of students...that any construction impacting any school site be followed by repaving of the streets adjacent to those sites, new markings of those streets, and repair of all walkways, sidewalks, and landscaping...[and] that BART minimize the congestion in the Belle Air neighborhood and in the proximity of Belle Air School, particularly when school is about to begin and when school is ending.

**Response.** The traffic management plan for construction activities will include control of traffic in the vicinity of construction. Precautions will be taken to provide necessary safeguards for school crossing areas at all impacted intersections during the appropriate periods of every school day. Please refer to Response 21.10 for a discussion of construction-related safety measures.

Please refer to Response 22.1 for a discussion of the integrity of SamTrans service and changes to SamTrans service during construction. BART's contractors will be responsible for repaving and restriping any roadways and sidewalks affected due to construction of the BART extension. The traffic management plan will include plans to minimize traffic impacts due to construction in the proximity of the local school, particularly when school is beginning or ending.

22.16. Development of BART...has the potential for establishing the area in closer proximity to the BART pathway as less desirable...The BART pathway and its related parking areas and bi- or multi-modal stations have the potential for isolating the Belle Air School community from the rest of the city...Since those occupying homes in poorer areas are most often families of lower socio-economic status or minorities, this means creating segregation....The District requests that BART

construction procedures endeavor to minimize impacts on the school community, particularly isolating it from the remainder of the city [and] that BART maintain the integrity of the Belle Air and Lions' Fields. Any unavoidable changes should result in relocation, not diminished capacity.

**Response.** Please refer to Response 22.2 for a discussion of perceived isolation of Belle Air School, Response 21.10 for a discussion of safety measure imposed on construction sites, and Response 22.31 for a discussion of laydown areas near schools.

- 22.17. [To avoid the] creation of the Belle Air School community as a BART parking area, the District requests that BART workers not park in the school community during construction.

**Response.** As part of the construction plan for the BART-San Francisco Airport Extension, BART will require construction workers not to park on school property and will request that workers not park in the Belle Air School community during construction without independent reasons for doing so. BART cannot prevent project personnel from parking legally in public areas, or from using local businesses.

- 22.18. Displacement of families living in the District's school communities and attending the District's schools will cause a loss to the District of its Average Daily Attendance (ADA) apportionment of approximately \$3,180.00 per student....The District requests that BART compensate it for a facilities study to determine whether the impacts of construction of the selected alternative will necessitate district reconfiguration; the District further requests that BART compensate it for any district reconfiguration and/or relocation found necessary by the study. The District requests that BART reimburse the District for any loss of revenue caused by displacement of students during the construction period, using the 1995 Second Period Report of Attendance as baseline data.

**Response.** Please refer to Response 16.34 for a discussion of financial assistance to the District to compensate for loss of ADA state funds.

- 22.19. The numbers of student requests for intradistrict transfers from schools impacted by traffic and other associated problems to schools not impacted by BART will increase....When these receiving schools reach capacity, there will be a need for additional classroom space and other resources....The District requests that BART reimburse the District for any loss of revenue caused by displacement of students during the construction period, using the 1995 Second Period Report of Attendance as baseline data.

**Response.** Please refer to Response 16.34 for a discussion of how BART will address demonstrable loss of income to districts.

- 22.20. Reductions of significant numbers of students at any school will result in staff layoffs done in accordance with the Education Code and employee contractual agreements....The District requests that BART enter into a mutual investigation of overall fiscal impacts on the District and negotiate a one-time settlement designed to minimize overall trauma to the students and staff of the District.

**Response.** BART's responsibility for compensation is derived from state and federal relocation laws. Please refer to Response 16.34 for further details on this issue.

- 22.21. Any BART construction which either detracts from the appearance of the school community or, in the case of aerial construction, separates the school community from the rest of the city will significantly contribute to labeling the school community as a less desirable neighborhood....The District requests that BART construction detracting from the appearance of the school community be minimized to the greatest degree possible.

- Response.** The impact to the Belle Air neighborhood during construction of the proposed project is discussed on page 3.13-71 of the DEIR/Technical Appendix. The construction-period impact to sensitive receptors is identified as significant and unavoidable. No mitigation exists to minimize the proximity impact to homes and the Belle Air School during construction. Construction of the aerial portion of the Base Case Alternative would not occur within 60 feet of the Belle Air School or St. John's School. Construction under Alternatives IV, V, VI, or the Aerial Design Option LPA would not visually affect schools because of the distance from the alignment and stations. BART will, to the extent feasible, minimize construction-related visual impacts. Please refer also to Response 22.5 for further discussion of potential visual impacts to the school community.
- 22.22. The diversion of traffic from the main routes through residential neighborhoods and the congestion resulting from increased traffic flow or a reduction in available routes may result in a delay in response times of police, fire, and medical personnel in the event of an emergency....The District requests provision for prompt emergency response times of police, fire, and medical personnel for all school sites.
- Response.** If adopted, the BART extension will alter local circulation patterns. It will be the responsibility of local emergency service providers to determine the best routes to minimize response times. As described on page 3.13-96 of the DEIR/Technical Appendix under Mitigation Measure 1.1, during the construction period, BART will consult with local agencies to identify detour routes and measures to maintain prompt response times.
- 22.23. All available fields are scheduled to their maximum capacities, and the potential for growth for these programs has already been severely curtailed due to the limited number of playing fields available....The District requests that BART maintain the integrity of the Belle Air and Lion's Fields. Any unavoidable changes should result in relocation, not diminished capacity. Such relocation should not result in a reduction of the overall available fields in the community.
- Response.** Please refer to Responses 17.77 and 22.31 for discussion of Belle Air Field and Lion's Field.
- 22.24. The equipment used for heavy and sometimes even for light construction is by nature noisy....The District requests that BART perform any high noise construction which interferes with instruction outside regular school hours...'that BART utilize sound barriers wherever possible to inhibit noises that interfere with instruction...', that BART route noisy traffic away from school during regular school hours, [and] that BART take any other necessary and appropriate steps available to prevent noise from interfering with instruction.
- Response.** Please refer to Response 21.9 for a discussion of the "Special Zone" restrictions on contractor noise.
- 22.25. Digging and moving dirt for BART construction in any proximity to Belle Air School are certain to create an increase in dust and dirt which will not only affect the cleanliness of the school, but have the potential for affecting the air and the overall school environment....The District requests that BART take any available and appropriate steps necessary to prevent increases in dust and dirt in schools [and] that when BART is responsible for increases in dust and dirt in schools, it takes immediate steps for removal.
- Response.** The air quality impacts of construction activities and proposed mitigations are discussed on pages 3.13-197 to 3.13-206 of the DEIR/Technical Appendix. Please also refer to Response 19.134 for a discussion of the measures that will be implemented to minimize the amount of particulate matter generated during construction.
- 22.26. The massive excavation necessitated by the construction of any BART line through a populated area is certain to involve contact with fuel, power, and high pressure gas lines....The District

requests that prior to any excavation work BART install shut-off valves or the equivalent equipment well above the construction area, but suitably located for emergency responses...that BART utilize every available safety precaution before and during construction in these areas [and] that BART utilize adequate shoring of soil in construction areas to prevent any dangerous settling or shifting.

**Response.** All existing utilities that cross the proposed BART alignment will be reviewed for condition and the ability to be maintained in place by the contractor during construction. Those utilities that are not in good condition, or are impacted by the BART alignment, will be relocated by BART contractors or by the utility owner on a case-by-case basis. The contractors will be required to have licensed engineers design shoring for open cuts in accordance with BART design criteria. All appropriate safety measures regarding fuel, power, and gas lines will be followed. Please also refer to Response 21.10 for a discussion of safety at BART construction sites.

- 22.27. Equipment use is a fascinating attraction, particularly for small children; equipment storage is an attractive nuisance. Further, lay-down areas have the potential for tremendous negative impacts on student health and safety....The District requests that BART provide secured areas inaccessible by children for equipment when it is not in use...that BART provide for safe supervision keeping students at bay when equipment is in use...that BART provide for the education of students and parents regarding the dangers of said equipment...that BART not develop any lay-down areas within 2,500 feet of the border of any school site [and] that BART not develop any lay-down areas which impinge upon the play areas of its students.

**Response.** Please refer to Response 21.10 regarding safety measures to be incorporated during the construction period. Please also refer to Response 22.31.

- 22.28. With the increased activities in the construction areas come the increased adult populations from outside the area....The District requests that BART provide for the appropriate education of students and parents regarding the dangers associated with advances by unwelcome strangers [and] BART provide appropriate security for the neighborhood and adjacent areas.

**Response.** Please refer to Response 21.10 regarding safety measures to be incorporated during the construction period. Please also refer to Responses 21.10 and 21.11 for a discussion of safety and security measures to be incorporated during the construction period.

- 22.29. During construction the use of heavy and light equipment, the increased traffic, and the associated increases in strangers in the area will create a significant need among students [and parents] for enhanced and informed awareness of appropriate safety procedures....The District requests that BART, in cooperation with school officials, implement a Safety Education Program for students.

**Response.** Please refer to Responses 21.10 and 21.11 for a discussion of safety and security measures to be incorporated during the construction period.

- 22.30. The Governing Board of the San Bruno Park School District opposes the cut-and-cover construction mode through the city of San Bruno [and] supports the bored tunnel construction mode, beginning at the appropriate point north of San Bruno Avenue and exiting at the appropriate point beyond the border of the city of San Bruno.

**Response.** The San Bruno Park School District's opposition to a cut-and-cover subway construction method and its support for the tunnel construction method through the City of San Bruno is noted. Please refer to Responses 17.67, 17.68, and 66.115 for discussion of the tunnel construction option through downtown San Bruno.

- 22.31. The Governing Board of the San Bruno Park School District opposes any use of Belle Air Field and/or Lion's Field for construction of any BART services, for storage of any BART equipment or

materials, for use as a laydown area during BART construction or for any activity that would impede their recreational uses by Belle Air School or the San Bruno public.

**Response.** Under Alternative VI, three potential tunnel mobilization sites are identified in the DEIR/SDEIS and shown in Design Appendix: Lion's Field Park (page 79 of the Design Appendix), SFIA property (page 79), and the Millbrae Station site (page 83). BART is evaluating the feasibility of each site based on the comments received and further development of the design. The DEIR/SDEIS identifies impacts for each of these sites. Please refer to Section 13.3, Construction/Transportation; Section 13.4, Construction/Land Use; and Section 13.10, Biological Resources. The San Bruno Park School District's opposition to the use of Belle Air School Field and/or Lion's Field Park is noted.

## 23. SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY

- 23.1. Ridership forecasts for the CalTrain do not vary among the alternatives analyzed, and neither does travel time. This appears to be counterintuitive, and bears further explanation, or investigation to corroborate or correct the forecasts.

**Response.** Significant CalTrain ridership differences were forecasted among the No Build Alternative, the TSM Alternative, and the BART build alternatives. CalTrain boardings in the year 2010 were forecasted to be 37,800 riders under the No Build Alternative, 49,500 riders under the TSM Alternative, and 46,900 riders under Alternative VI. Smaller differences in CalTrain ridership, from 46,100 riders to 46,900 riders in 2010, were forecasted among the various BART build alternatives because the factors affecting CalTrain ridership would have minor variations among the BART build alternatives. The level of CalTrain service was defined as the same for all BART build alternatives. This level of service includes the travel time on CalTrain and the frequency of CalTrain trains. Differences among the BART build alternatives, such as differences in travel time, account for the changes in CalTrain ridership forecasts among the BART build alternatives because the transfers between BART and CalTrain vary among these build alternatives. Please refer to Response 11.2 for a discussion of ridership and travel time differences among alternatives with regard to CalTrain passengers destined for the SFIA. Please also refer to Response 66.111 for a comparison of CalTrain riders accessing SFIA under BART build alternatives.

- 23.2. Although we do understand that the AA/DEIS dealt with some of these issues, it is not clear how these forecasts take into account the extension of the CalTrain into downtown San Francisco. While we are not necessarily proposing that the CalTrain downtown extension be brought back into the set of alternatives analyzed, it appears necessary to clarify the assumptions made.

**Response.** The assumption made in the BART extension DEIR/SDEIS is that the San Francisco terminus of CalTrain is at 4th and Townsend Street. The description of the TSM Alternative on page 2-7, paragraph four, sentence one of the DEIR/SDEIS includes a reference to "the CalTrain terminus at its present location at 4th and Townsend Streets in San Francisco." Please refer to Response 11.6 for a discussion of transportation-related impacts to the BART extension with the CalTrain downtown extension.

- 23.3. There should be clarification about any assumptions made (either in the DEIR or in the AA/DEIS) regarding high speed (intercity) rail service in the CalTrain corridor, as these may have impacts on potential CalTrain ridership.

**Response.** The potential for high speed rail within the CalTrain right-of-way is not precluded by the design of the BART extension under any alternative.

## 24. SAN FRANCISCO INTERNATIONAL AIRPORT

- 24.1. Page 2-30 [of the DEIR/Technical Appendix], second full paragraph: The text indicates that the portion of the ALRS that crosses to the west of US 101 was not "previously studied" by SFIA. The final sentence of this paragraph should be replaced with the following to provide a more precise description of SFIA's consideration of this issue: "However, the portion of the ALRS that crosses to the west over Highway 101 was not analyzed in the SFIA Master Plan FEIR."

**Response.** To clarify SFIA's consideration of the Airport Light Rail System (ALRS) west of Highway 101, page 2-30, paragraph two, sentence four, is replaced by the following sentence:

~~However, the portion of the ALRS that crosses to the west over Highway 101 was not previously studied, and this segment serving the CalTrain Station is analyzed in the DEIR/SDEIS analyzed in the SFIA Master Plan FEIR.~~

- 24.2. Pages 40-42 of the Design Appendix: Alternative IV (Aerial east of US 101) is in direct physical conflict with Master Plan projects: alignment of the ALRS, widening of McDonnell Road, and the location of the ALRS Maintenance Facility adjacent to the Airport's Long Term parking lot. Please address these conflicts.

**Response.** The commentor is correct that Alternative IV appears to conflict with the SFIA Master Plan. This conflict renders Alternative IV impractical for purposes of adoption. Please see Response 2.7 for a discussion of the new LPA, which is not Alternative IV due to the conflict, among other reasons.

- 24.3. Pages 65-68 of the Design Appendix: Alternative V-A.2's proposed aerial alignment would penetrate the secured Airfield Operations Area ("AOA") and bisect the aircraft taxiway access to the west sides of Boarding Areas A and G. This alignment will also cause the elimination of 13 aircraft gate positions for the new International Terminal. Please address this conflict.

**Response.** The proposed Design Option V-A.2 aerial alignment would not conflict with the aircraft taxiway to proposed boarding areas A and G at San Francisco International Airport. It may conflict with access to other SFIA Master Plan uses. A decision to select this alternative would require design modification to eliminate the conflict with airport land uses. The Aerial Design Option LPA would not require disruption of the AOA or taxiway access to boarding areas.

- 24.4. [Pages 65-68 of the Design Appendix:....The DEIR/SDEIS does not address how an aerial BART structure will interface with the circulation roadways to serve the new International Terminal and GTC/RCG; on-and-off ramps to US 101; and the ALRS serving the terminal complex and GTC/RCG under the Master Plan. Please analyze and address any conflicts.]

**Response.** The level of design for the station plans and associated aerial guideway was conceptual. The Airport Master Plan available to BART at the time this alternative was being considered was produced in 1992 and did not reflect numerous refinements made by SFIA in late 1994 and early 1995 for major elements that would be traversed by the aerial guideway and station.

The Aerial Design Option analyzed in the FRDEIR/S#2DEIS did have the benefit of the refinements made by the SFIA in late 1994 and early 1995 and were considered.

- 24.5. Page 123 of the Design Appendix: The DEIR shows access to the west of Bayshore station from northbound Bayshore by using a ramp that would have been constructed as part of the SFIA Master Plan. This proposed elevated structure over McDonnell Road has been eliminated from the Master Plan. Please correct and address.

- Response.** Under the 1992 LPA and Alternative III, the proposed elevated structure over the southern segment of McDonnell Road to access the Airport Intermodal Station also included a crossing over Highway 101. With SFIA's elimination of the elevated structure over McDonnell Road, it would be necessary to construct a new flyover ramp over Highway 101 using the new northbound exit ramp now being designed by SFIA to provide access to the Airport Intermodal Station.
- 24.6. Page 2-78, Table 2.3-1: The Table is entitled "Estimated Capital Costs of BART-San Francisco Airport Extension/Conceptual Cost Estimate, 60-Month Schedule/Thousands of Dollars at Mid-Point of Construction (1996)." If 1996 refers to the mid-point year of construction in the 60 month schedule, then it appears cost estimates and mid-point year need to be updated. Please correct or clarify.
- Response.** At the time the conceptual cost estimates were completed in the SDEIR/SDEIS, 1996 was estimated to be the midpoint of construction. Updates and refinements to the schedule and capital cost figures are discussed in the cost estimates in Chapter 6, Volume I, of this FEIS/FEIR.
- 24.7. Page 2-106 [of the DEIR/Technical Appendix]: Table 2.5-1 identifies one screening criterion for evaluating the proposed alternatives as "Satisfies BART/CalTrain/SFIA design and safety criteria." If not addressed elsewhere in the DEIR/SDEIS, please describe the SFIA design and safety criteria and explain how the criteria are applied.
- Response.** Federal Aviation Regulations which apply to the Airport were used as design and safety criteria.
- A review of the Screening of Alternatives Report for the nineteen alternatives proposed during the DEIR/SDEIS screening process shows that none of the alternatives were rejected from further study because of Federal Aviation Regulations. However, during the scoping process for the AA/DEIS/DEIR, an aerial BART alignment to the Airport terminals was proposed across aircraft activity areas, which violates Federal Aviation Regulations, Part 77 surface restriction lines. This was clearly an infeasible alternative which violated safety criteria which apply to the Airport and was rejected from further study. For more detail on the scoping process for the AA/DEIS/DEIR see the AA/DEIS/DEIR Conceptual Definitions of Alternatives Report, Task 4, Deliverable 5, October 1990.
- 24.8. Page 2-107 [of the DEIR/Technical Appendix]: BART's cost estimates in Table 2.5-1 are based on the MTC estimates from the AA/DEIS/DEIR and "professional judgment" or "other reports." If not addressed elsewhere in the DEIR/SDEIS, please reference the reports and the persons whose professional judgment is relied upon.
- Response.** Table 2.5-1 refers to the Screening Criteria used in the evaluation of the proposed alternatives as defined in mid-1993. Page 2-105 of the DEIR/Technical Appendix, the page preceding Table 2.5-1, has a footnote reference to the BART San Francisco Airport Extension Screening of Alternatives Report, dated August 1993. That reference has additional information regarding cost estimates. In summary, the estimates for these alternatives were based on estimates prepared for MTC in October 1991 by Parsons Brinckerhoff, Quade & Douglas, Inc. Some figures were derived for CalTrain relocation by BART/BATC staff, based on professional judgment.
- 24.9. Page 3.1-2 [of the DEIR/Technical Appendix], paragraph three, sentence one, the word "largest" should be replaced with "busiest."
- Response.** Page 3.1-2, paragraph three, sentence one, is revised as follows:

The SFIA is the seventh ~~largest busiest~~ airport in the world, serving 29.9 million annual airline passengers in 1990.

- 24.10. Page 3.1-2 [of the DEIR/Technical Appendix], fourth full paragraph: To more accurately reflect the anticipated timing of annual airline passenger increases at SFIA, the phrase "between 1990 and" in the first sentence should be replaced with "by" and the words "by 2006" should be added after "42,400" at the end of the second sentence.

**Response.** To clarify the text regarding the timing of projected growth at the SFIA, page 3.1-2, paragraph four, sentence one of the DEIR/Technical Appendix is amended as follows:

Growth projections included in the *San Francisco International Airport Final Draft Master Plan* (SFIA Master Plan) show that annual airline passengers are predicted to increase from 29.9 million to 51.3 million ~~between 1990 by~~ 2006.

Page 3.1-2, paragraph four, sentence two is similarly amended to read:

Associated with this increase will be an employer increase, from 33,400 to 42,400 ~~by~~ 2006.

- 24.11. The DEIR/DEIS should also substantiate its assertion that growth rates for SFIA are substantially greater than those for the study area in general, by providing specific growth rates for the study area. (Page 3.1-1, [of the DEIR/Technical Appendix] fourth full paragraph)

**Response.** The annual compounded growth rate for passengers reflected in the SFIA Master Plan is 3.43 percent. The annual compounded growth rate for airport employees is 1.5 percent. The employment growth rate in San Mateo County between 1990 and 2005 (15 years) is projected to be only 1.47 percent annually according to ABAG, indicating a faster growth rate in both employment and passengers at the airport than in employment growth throughout the County.

- 24.12. Page 3.1-3 & 3.1-5 [of the DEIR/Technical Appendix], first full paragraph: The figures for parking contained in this paragraph appear to be incorrect. As indicated on page 145 of the Master Plan EIR, SFIA has a total of 25,559 spaces (12,934 for employees, 10,345 for short- and long-term airline passengers and 2,280 for rental cars, courtyard and taxi staging). 5,170 spaces are provided by privately operated facilities not on SFIA property.

**Response.** The text should be modified to revise the number of parking spaces provided by the airport. Page 3.1-3, paragraph one, sentences three and four of the DEIR/Technical Appendix are revised as follows:

The SFIA has a total of ~~22,889~~ ~~25,559~~ parking spaces; ~~9,384~~ ~~10,345~~ for short term and long term airline passengers; ~~2,280~~ for rental cars, courtyard and taxi staging; and ~~13,508~~ ~~12,934~~ for employees. An additional ~~3,550~~ ~~5,170~~ long-term parking spaces are provided by privately operated facilities that are not on SFIA property.

- 24.13. The DEIR/SDEIS should also be revised as follows to clarify that the combined shortage of parking for passengers and employees will be about 4,000 spaces for employees and passengers in 2006. "The SFIA Master Plan, however, still projects a combined shortage of 4,000 spaces for employees and passengers in 2006." (Page 3.1-2, second paragraph & fourth paragraph)

**Response.** It is important to clarify future parking demand at SFIA. However, the commentor's request to add this information to the text on page 3.1-2 is unnecessary because the information

regarding the 4,000 parking space shortfall in the year 2006 is already included in the DEIR/Technical Appendix on page 3.1-5, at the end of the first paragraph.

- 24.14. Page 3.1-5, First Two Lines: The DEIR/SDEIS states that before implementation, the Federal Aviation Administration may have to approve SFIA's Master Plan under the National Environmental Policy Act (NEPA). This statement is erroneous and inconsistent with the Master Plan FEIR (vol. II, page 411). The statement should be revised....

**Response.** The commentor is incorrect. The first sentence on page 3.1-5 of the DEIR/Technical Appendix relating to the SFIA Master Plan correctly states that before implementation the plan may have to be approved by the Federal Aviation Administration under NEPA, even if no federal funds are used during implementation. Please refer to the September 29, 1995 letter from John L. Pfeifer, Manger, Airports District Office, Federal Aviation Administration, to Mr. Duke Briscoe, Acting Director of Airports, SFIA.

- 24.15. Page 3.1-4, last paragraph:...Please confirm that [SFIA Master Plan and Master Plan transportation] improvement measures have been factored into the transportation impacts analysis in the DEIR/SDEIS.

**Response.** Special measures were taken to incorporate growth in SFIA's activity as proposed under the SFIA Master Plan EIR. Employment trips were expanded to meet anticipated growth as were air passenger trips. The procedures used to make these adjustments are discussed in the Transportation Technical Report, pages 6 through 12.

- 24.16. What is the impact of the BART alternatives on the County's Circulation Management Plan?

**Response.** BART used the same methodology to assess traffic impacts as used in the San Mateo County Congestion Management Plan (CMP) and will mitigate significant traffic impact whenever possible. BART will fund improvements according to its fair share based on the proportionate contribution to the significant impact.

- 24.17. Page 3.1-13, sixth paragraph:...Please consider that the walk distance for other domestic passengers to their destination is between 600-2500 feet. In such cases, it is likely that these passengers may elect to take the ALRS, making Alternative VI comparable with other alternatives. Please revise.

**Response.** BART staff estimated that air passengers would choose to walk for as long as six minutes at a rate of 250 feet per minute once at the International Terminal BART Station before choosing to transfer to the ALRS. Thus destinations beyond 1,500 feet were accessed by the ALRS rather than walking. BART believes these assumptions are reasonable and reflect the average mode choice that would be made by air passengers and greeters.

- 24.18. Page 3.1-16, Fourth paragraph:...The DEIR/[Technical Appendix] should clarify that this statement is true in terms of regional ridership, and that BART ridership increases to SFIA (page 3.1-19, Table 3.1-8) are approximately the same for all build alternatives.

**Response.** The reference made in the fourth paragraph on page 3.1-16 of the DEIR/Technical Appendix refers to Table 3.1-9, BART Daily Patronage by Station. The text discusses transit patronage within the study area. This discussion does not refer to, nor does it imply, differences in ridership to the SFIA.

- 24.19. Page 3.1-31, second paragraph: The DEIR states that "there is no ALRS under the No Build Alternative." Please clarify that this statement refers to the extension of the ALRS to the West of Bayshore, and not to the construction of the ALRS proposed as part of SFIA's Master Plan.

**Response.** This commentor is correct. Page 3.1-31, paragraph two, of the DEIR/Technical Appendix sentence four is revised to read

There is no ALRS service to west of Highway 101 under the No Build Alternative.

- 24.20. On page 3.13-46 the DEIR states that construction of Alternative V-A would "disturb circulation at the SFIA." However, there is no discussion of how and where circulation at SFIA would be disturbed, nor the extent of the disturbance.

**Response.** Please refer to Response 24.28 for a discussion of the impacts to traffic circulation at SFIA under this Design Option.

- 24.21. On page 3.13-31[Impact 11]...The DEIR[/Technical Appendix] identifies the construction of freeway ramps connecting Highway 101 with the Airport Intermodal Station under the 1992 LPA as affecting freeway traffic. It concludes that the measure to coordinate the construction of the freeway ramps with the construction of the Airport Intermodal Station would reduce the impact to an insignificant level. No explanation is given to support this conclusion.

**Response.** Mitigation Measure 11, on page 3.13-31 of the DEIR /Technical Appendix, to reduce the impact to Highway 101 during construction of the 1992 LPA, would be to schedule and conduct work that would affect traffic operations during off-peak hours. Scheduling the work on the ramp columns that would disrupt traffic on Highway 101 during late night and early morning hours when freeway volumes are relatively low would reduce this impact to insignificant. To minimize the number of nights and potentially morning commute periods that would be disrupted by constructing the SFIA ramps and then the columns for the ramps associated with the proposed Airport Intermodal BART Station the suggested mitigation was to coordinate the schedule of the two projects such that the nights that would affect traffic on Highway 101 would overlap when possible. This information relating to the proposed new SFIA ramps was based on the best information available at the time issuing the DEIR/SDEIS.

The proposed freeway ramp for the Airport Intermodal Station under the 1992 LPA and Alternative III conflicts with the current SFIA plans for their planned Inbound/Outbound ramps to Highway 101. Both the northbound exit from the freeway and the southbound entrance from the BART station would conflict with the SFIA plans which are to design their ramp junctures at exactly the same locations. The most cost effective method to build the freeway ramps to and from the BART station would be to share the same Airport entrances and exits with the SFIA Inbound/Outbound ramps. The freeway ramps to the Airport Intermodal Station might not be constructed at the same time as the SFIA Inbound/Outbound ramps because the airport plans are further advanced than the 1992 LPA which was replaced by the Serial Design Option as the locally preferred alternative. The mitigation measure to schedule and conduct working during off-peak hours that would affect Highway 101 operations would reduce this impact to an insignificant level.

- 24.22. The...bibliography that is prepared by chapter topic at the end of the DEIR, such as the bibliography for Transportation on page 9-3, is not helpful to the reader in determining the source of the data. Footnotes or citations should be provided to support the conclusions in the DEIR/SDEIS.

**Response.** The choice of using footnotes or identifying references in a separate chapter is a stylistic matter and does not affect the validity of the environmental analyses. When text in the EIR/EIS is drawn from another source, a citation is provided. If the source is written material, the author and date are noted in parentheses. If the source is a personal communication, the individual and date of contact are noted in parentheses. The reader desiring a fuller citation can look up the source in Chapter 9, References.

- 24.23. Page 3.1-100: The DEIR/Technical Appendix cites the 1985 Highway Capacity Manual as the basis for the LOS definitions. However, the Transportation Technical Report (page 51) cites the Circular 212 method for analyzing the impacts on localized intersections. The DEIR/Technical Appendix should clearly explain...which method was used.

**Response.** Table 3.1-71a, Level of Service Definitions Controlled Access Roadways - Freeways, and Table 3.1-71b, Level of Service Definitions Signalized Intersections, on page 3.1-100 do provide the level of service definitions from the 1985 Highway Capacity Manual, which are based on the volume to capacity ratio, while the Circular 212 analysis methodology was used to calculate this volume to capacity ratio. The LOS definitions used from the 1985 Highway Capacity Manual are not a methodology.

- 24.24. Page 1-7, third paragraph; 3.1-2, second paragraph; 3.1-16, fourth paragraph: What is the significance of the statement in the DEIR that SFIA is the single largest traffic generator in the area? How is a single traffic generator defined?

**Response.** A traffic generator is an activity center from which vehicle trips originate or are destined and includes households, retail stores, factories and other employment sites. SFIA consists of many separate corporate businesses as well as public agencies that, as a whole, are located on airport property. Political boundaries do not define an activity center; for example, the Town of Colma cannot be considered a traffic generator. The service and employment activity occurring at the SFIA attracts more vehicle and transit trips than any other individual traffic generator in the study area. Hence, the need for rapid rail service to SFIA is highlighted by the fact that the airport is the largest traffic generator in the area.

- 24.25. Page 3.1-101 et seq.: For the lay reader, please define the term "weaving segment" as used in the DEIR. The DEIR/SDEIS analysis does not include ramp volumes, but only the weaving sections between the San Bruno Avenue interchange and SFIA. Please explain.

**Response.** A weaving section is a section of roadway up to approximately one half mile, where two or more traffic streams must cross each other, thus requiring lane changing maneuvers. The weaving analysis in the DEIR/SDEIS was performed for the freeway segments between the southbound San Bruno Avenue on-ramp to the mainline and the Millbrae Avenue off-ramp, rather than between the San Bruno Interchange and SFIA. This weaving section has two parts: a 1,000 foot section between the San Bruno Avenue entrance and the SFIA ramp entrance, and a 2,700 foot section between the SFIA entrance and the dropping of one freeway lane at the Millbrae Avenue exit. Ramp volumes were analyzed by the sub-area traffic model and were part of the level of service analysis of intersections included in the DEIR/SDEIS. The volumes as well as the level of service calculations for all intersections analyzed were attached as appendices to the Transportation Technical Report.

- 24.26. Page 3.1-111, first full paragraph: Please explain why the DEIR concludes that all BART Build alternatives, except Alternative VI, would significantly affect the freeway segment from SFIA to Millbrae Avenue

**Response.** The Millbrae Avenue Station under Alternative VI would be an end-of-the-line station that attracts the vast majority of vehicles on Highway 101 whose drivers are destined for a BART station. In all other BART build alternatives, these vehicles on Highway 101 must travel north of the Millbrae Avenue Interchange to access a BART station.

- 24.27. Page 3.1-87 [of the DEIR/Technical Appendix]: Please explain the process by which the DEIR/SDEIS selected intersections for analysis in this document, and why certain intersections such as California Avenue/Millbrae Avenue, Old Bayshore/Millbrae Avenue, South Airport Boulevard/Highway 101 north bound ramps/Radisson Hotel were not included in the analysis.

**Response.** Comments were received on the 1992 BART extension AA/DEIR/DEIS requesting the analysis of additional intersections beyond the 17 intersections included in that study should be addressed. Based on professional judgment and public comments received suggesting additional intersections, a total of 97 intersections were chosen for analysis as potentially having a significant impact by BART-related traffic. In the examples provided, the intersection of California/Millbrae was not studied because this intersection would be eliminated by the railroad grade separation project that is expected to be completed prior to opening of the BART extension. The other two intersections listed are east of Highway 101, and travel demand modeling indicated that routes east of Highway 101 in the study area would be used by very few vehicles accessing a BART station, i.e., less than ten during the A.M. or P.M. peak hour.

- 24.28. Page 3.13-46, first paragraph: Construction of the spur in an aerial configuration to the Airport GTC under Alternative V-A would impact freeway traffic and disturb circulation at SFIA. The DEIR/SDEIS has not described how SFIA circulation would be impacted, nor has it identified measures to mitigate the impact. If the only identified measure (coordination of construction schedules) is also intended to mitigate the impact on SFIA circulation, the DEIR/SDEIS has not explained how this measure would reduce the impact on SFIA circulation to a level of insignificance.

**Response.** The construction of the aerial configuration under Design Option V-A would disturb traffic circulation at SFIA. This disruption would be relieved through coordination of construction schedules to minimize the duration of potential delays.

SFIA staff would have jurisdiction and control over this construction, including the scheduling of specific construction activities. The BART alignment on SFIA property under Design Option V-A.2, the Aerial Alignment, traverses parking lots and crosses over the access ramps into the terminals and the short-term parking garage. Traffic on these access ramps would not be affected except for very short periods of time because construction activity would occur on either side of them. Construction activities that forced closure of some or all lanes on a specific access ramp would be scheduled during late night or very early morning hours to minimize traffic impacts to SFIA.

- 24.29. Page 3.13-13, fourth paragraph [of the DEIR/Technical Appendix]: Under Alternative VI, what are the impacts of BART's proposal to build a temporary road and trestle on SFIA property and on wetlands to haul excavated materials to landfill or other construction sites?

**Response.** The temporary construction access road on the west-of-Bayshore parcel would consist of an 800-foot length of all-weather road on the ground surface and a 40-foot-wide (approximate) temporary trestle bridge over Cupid Row Canal. The ground level portion of the roadway would consist of a layer of gravel placed over a layer of geotextile fabric laid on the existing ground surface or some other less intrusive means designed to minimize impacts to the native soils and vegetation. The materials used to construct this temporary construction access road would be removed after completion of construction and the native ground elevations and vegetation restored to its preconstruction state. The ground level portion of the temporary construction access road would be built on the location of the existing dirt road on SFIA property easterly of Lion's Field. Traffic would connect directly with the collector/distributor road between San Bruno Avenue and Highway 101 at the south-east corner of the existing PG&E substation.

A temporary pile-supported trestle or rib bridge would be constructed to span the existing Cupid Row Canal in order to provide a driving surface above the wetland areas. The trestle would be elevated, allowing unrestricted flow of water and wildlife movement below in the canal. The trestle would be removed after completion of construction. Types of impacts of the road and trestle to the wetlands and other biological resources are presented in Chapter 3.13-10, Construction/Biology.

24.30. Page 3.13-48, last paragraph: The DEIR/SDEIS statement that “there would be no impacts to air travelers or ground transportation due to construction of the BART station exceeding those occurring due to terminal construction” cannot be based solely on the assumption of concurrent construction schedules with the Airport’s new International Terminal. BART’s construction methods and location are determining factors of potential impact to air travelers and Airport operations, and must be analyzed and mitigated.

**Response.** The comment refers to construction of the Alternative VI International Terminal Station, which would be aerial. The document states in the same paragraph referenced that “construction of the station would be concurrent with construction of the International Terminal and the Airport GTC.” BART and SFIA staff have been meeting and continue to meet bi-weekly, to coordinate the construction activities of the potential BART extension with the SFIA expansion and improvements.

All design and construction of BART facilities east of the westerly right-of-way of Highway 101 will be the responsibility of the SFIA. SFIA will coordinate the design and construction of BART facilities with the design and construction of the SFIA International Terminal and adjacent Concourses G and H. After facilities construction is complete, BART contractors would complete the installation of traction power, train control and communications equipment. This work would involve smaller crews and the schedule would be closely coordinated with SFIA to minimize the impact on other SFIA construction and operations.

24.31. Page 3.1-163, third paragraph: Under CEQA, a parking deficit is not necessarily considered a significant impact. BART’s proposal to provide additional parking spaces to mitigate the modeled parking demand has itself potential environmental impacts (traffic, air quality, visual, height, neighborhood character, shadow, and wind). It appears that these impacts have not been analyzed in the DEIR/SDEIS. Please clarify.

**Response.** The only stations where parking spaces are proposed to be increased are the Chestnut Station under Alternative III (100 spaces) and the Tanforan Station under the 1992 LPA and Alternative III (500 spaces). This increase in spaces would require a significant change in the design of the parking facility at Tanforan but not at Chestnut. At Tanforan, two additional parking levels would be required, resulting in a structure with ground floor parking and three levels above. This would be identical in scale, height, and bulk to the Tanforan parking structure proposed under Alternatives IV and V. The analysis of these alternatives indicates no additional impacts would be expected as a result of raising the parking facility two levels. The only significantly impacted intersection in the vicinity of the station is El Camino Real/Sneath, and Table 3.1-77 shows that the intersection level of service would be better under Alternatives IV and V, compared to the 1992 LPA. The visual impact analysis for Alternatives IV and V indicates that the parking facility would be compatible with surrounding uses, even at a height two levels greater than under the 1992 LPA. No additional traffic impacts would occur with these increases in parking spaces. The analysis of traffic impacts included all the vehicles forecasted to access the BART station. This analysis indicated that the initial parking supply would not be adequate for the parking demand.

24.32. Page 3.1-175: Under Alternative IV the impact to the Airport long-term parking lot regarding the number of spaces displaced and its financial impact (revenue lost) on SFIA has not been addressed. Please address.

**Response.** Chapter 3.2, Section 2.3, Land Use/Economic Activity Impact Assessment and Mitigation of the DEIR/Technical Appendix, is modified to include the following impact below paragraph one, on page 3.2-47:

**San Francisco International Airport**

**10. Existing parking would be displaced by the Airport Long-Term Parking Station. (S)**

MITIGATION MEASURES. The following measure would reduce the impact to an insignificant level.

10.1 *Parking Space Replacement.* BART will provide one-to-one replacement parking on SFIA property for any lost spaces due to the Airport Long-Term Parking Station.

All subsequent impacts (existing Impacts 10 through 12 on pages 3.2-47 and 3.2-48) are renumbered to acknowledge the insertion of the above impact. The replacement parking would be construction of a garage on a portion of the SFIA long term parking lot, or commensurate compensation to the SFIA, for the loss of parking, depending upon agreement between BART and SFIA. No new impacts would be associated with construction of this garage. It would be visually compatible with the existing parking lot setting.

- 24.33. Page 3.13-14 [of the DEIR/Technical Appendix], paragraph two: The proposed schedule anticipates a 40 month construction period, with work at each of the stations to be undertaken concurrently. It is assumed that all stations built as part of this extension project will be operational at the same time. If all stations are not contemplated to be operational at the same time, the impacts and the mitigation measures of a phased operation must be addressed. Please clarify whether the 40 month construction period is consistent with Table 2.3-1 (page 2-78) which notes a 60 month schedule.

**Response.** Phased construction is not contemplated at this time. The 40-month schedule identified on page 3.13-14 of the DEIR/Technical Appendix includes the time to design, furnish, construct, and test the extension. The 60-month schedule under Alternative VI, identified on page 2-78, also includes the time to obtain environmental approval and complete preliminary design.

- 24.34. Page 3.2-25 [of the DEIR/Technical Appendix], second full paragraph: The text, as currently written, suggests that the Airport Land Use Commission was created specifically to address SFIA. It should be clarified to indicate that the ALUC was created to develop plans for land use around airports generally.

**Response.** The commentor is correct in pointing out that an Airport Land Use Commission (ALUC) is established within a county to oversee all airports in that county, not just one in particular. Page 3.2-25, paragraph two, sentence three of the DEIR/Technical Appendix is revised as follows:

In recognition of the impact of SFIA operations on adjacent communities, The state required the establishment of an Airport Land Use Commissions (ALUC) in counties such as San Mateo to develop land use plans around airports.

- 24.35. Page 3.2-25 [of the DEIR/Technical Appendix], third full paragraph: The text currently indicates that the west of Bayshore parcel “is not addressed by the SFIA Master Plan.” To more accurately reflect the discussion of the west of Bayshore parcel in the SFIA Master Plan and the Master Plan EIR, the third sentence should be revised as follows: “This area contains habitat for sensitive wildlife species and is not analyzed for development under the Master Plan EIR.” (page 3.2-6 [of the Summary DEIR/SDEIS], first paragraph)

**Response.** Page 3.2-25, paragraph three, sentence four of the DEIR/Technical Appendix is revised as follows:

This area contains habitats for sensitive wildlife species and is not addressed by the SFIA Master Plan pending a habitat conservation study and specific permit(s) from the California Department of Fish and Game and the U.S. Department of Fish and Wildlife, analyzed for development under the Master Plan EIR.

- 24.36. Page 3.2-25, last paragraph and page 3.2-26: The phrase "among other projects," should be inserted after "1990-1996" in the third sentence to clarify that this list of projects is merely illustrative. The last sentence should be revised as follows:

"The long-term plan, covering improvements beyond 1996, includes among other projects, cargo and commercial facilities, parking lot expansion, as well as identifying a potential future extension of the Airport Light Rail System to mass transit." ([Also continued on] page 3.2-6 [of the Summary DEIR/SDEIS], second paragraph)

**Response.** Based upon information provided by the commentor, page 3.2-25, paragraph four, sentence three of the DEIR/Technical Appendix is amended as follows:

The near-term plan for 1990-1996, among other projects includes development of the Airport Light Rail System, the Ground Transportation Center and the International Terminal.

Page 3.2-25, paragraph four, sentence five (on page 3.2-26) of the DEIR/Technical Appendix is revised as follows:

The long-term plan, covering improvements beyond 1996, includes ~~extension of the Airport Light Rail Station to connect to a transit station on the property west of Highway 101, as well as expanded parking, among other projects, cargo and commercial facilities, parking lot expansion, as well as a potential future extension of the Airport Light Rail System to mass transit.~~

- 24.37. Page 3.2-85, third paragraph: The DEIR/[Technical Appendix] infers that there would be a displacement of some existing land uses at SFIA from the construction of the Airport International BART Station. Please identify those uses that would be displaced by the Airport International BART Station.

**Response.** The construction of the international terminal will displace current airport land uses. The construction of BART in conjunction with the International Terminal would not cause additional displacement of airport land uses. However, if the international terminal was not constructed in conjunction with construction of the BART station, then land uses such as the United maintenance facility, car rental facilities, and cargo storage facilities could be displaced.

- 24.38. Page 3.13-63, third full paragraph: The DEIR/Technical Appendix acknowledges that SFIA activities would be disrupted during construction of the cut-and-cover subway segment and Airport GTC Station under Alternative V-A, and that there are measures that would mitigate this impact to a level of insignificance. Airport operations cannot be disrupted. It is SFIA's policy that cut-and-cover construction on any portion of active airfield or across any Airport roadway will not be permitted for any on-Airport alternative.

**Response.** Alternative V-A Subway into the Airport is stated to be "by tunneling." If tunneling is used, there will be no disruptions to Airport operations. The impacts to runways will be avoided. As a result, tunneling mitigates impacts to insignificant levels.

Alternative V-A would impact the Airport's Master Plan which includes expansion of runways into the BART planned track alignment.

- 24.39. Pages 3.13-1 et seq.: The DEIR/Technical Appendix does not address the construction impacts of on-Airport alternatives of SFIA. The document has not disclosed BART's construction impacts, both cumulative and project-specific, on SFIA operations, including impacts of increased noise, dust, construction traffic, movement of construction equipment, and visual disruption. The

DEIR/SDEIS has not identified those roads on Airport property that will be used for hauling and has not disclosed the impact on Airport circulation.

**Response.** Construction noise limits contained in BART's system design criteria would be applicable to SFIA passenger areas and office spaces (see DEIR/Technical Appendix pages 3.13-158 and 159). The existing ambient noise environment would be taken into account in setting appropriate noise limits for outdoor areas that are exposed to traffic and jet noise. SFIA is in the process of designing a new International Terminal (IT) which may be linked to BART. It is assumed that the Airport BART station and the IT would be built simultaneously.

Construction-related air quality impacts are discussed in Section 3.13.13 of the DEIR/Technical Appendix. Air quality impacts are evaluated on the basis of total construction-related pollutant emissions over the entire project corridor. Numerical significance thresholds for construction-related pollutant emissions were developed from Bay Area Air Quality Management District (BAAQMD) guidance and are identified in Table 3.10-4 of the DEIR/Technical Appendix. As discussed in Section 3.13.13 of the DEIR/Technical Appendix, predicted construction-related emissions of oxides of nitrogen ( $\text{NO}_x$ ), reactive organic gases (ROG), carbon monoxide (CO), nitrogen dioxide ( $\text{NO}_2$ ), and particulate matter ( $\text{PM}_{10}$ ) exceed the relevant significance thresholds. These construction-related emissions would contribute to regional air quality problems including ozone ( $\text{O}_3$ ) formation, visibility reduction, and acid deposition. In addition, these construction-related emissions could potentially result in temporary exceedances of the state or federal CO or  $\text{PM}_{10}$  ambient air quality standards at locations immediately adjacent to, and downwind of, the emissions source. Therefore, it is possible that temporary exceedances of the state or federal CO or  $\text{PM}_{10}$  ambient air quality standards could occur at the San Francisco International Airport. Please note that Mitigation Measures 1.1 through 1.6, described on pages 3.13-198 through 3.13-200 of the DEIR/Technical Appendix, are prescribed to minimize construction-related pollutant emissions.

Please refer to Response 24.28 for a discussion of traffic impacts during construction under Design Option V-A.2. Similar to Design Option V-A.2, under the Aerial Design Option LPA SFIA staff would have control over this construction including the scheduling of specific construction activities. The BART alignment on SFIA property under the Alternative VI Aerial Design Option, traverses parking lots to the north of the SFIA terminal egress ramps. Traffic on these ramps would not be affected.

- 24.40. Pages 3.2-55 et seq.: The DEIR/[Technical Appendix] does not address the land use impacts on SFIA tenants for each of the alternatives. For example, the Alternative IV alignment (page 3.2-67) could significantly impact Airport tenants with long-term leases along the entire length of McDonnell Road.

**Response.** Further design of an alternative and determination of phasing in relation to proposed changes at the airport are required to accurately determine potential impacts on Airport tenants. If displacement of airport tenants were to occur, SFIA would relocate the tenant. BART and SFIA would agree to terms and conditions of the relocation.

- 24.41. Page 3.13-86 et seq.: The DEIR/[Technical Appendix] does not address any potential archaeological impacts during construction at the Airport, and therefore has not provided for adequate mitigation.

**Response.** A revised Mitigation Measure 2, page 3.4-8 of the Summary DEIR/SDEIS requires action, to address archaeological resources uncovered during construction of the project corridor. This measure will be implemented by both transportation authorities and agencies responsible for the protection of significant cultural resources, including potential archaeological deposits at the Airport. Please also refer to Response 6.29, and 16.3 regarding archaeological resources discovered during construction.

24.42. Page 3.5-8 et seq. [of the DEIR/Technical Appendix]: For any BART alignment crossing SFIA property, BART must provide, for SFIA review, a security plan for BART's construction and operations. BART's design and security plan must satisfy FAA security guidelines.

**Response.** BART will be developing a security plan. To assure that portions of the plan relevant to SFIA satisfy FAA security guidelines, BART's security consultant will coordinate and consult with both SFIA and FAA regarding security concerns.

24.43. Page 3.5-8 [of the DEIR/Technical Appendix], last paragraph: According to the DEIR, every jurisdiction in the project corridor has entered into a "San Francisco Bay Area Rapid Transit District Emergency Procedures Policy Vital Fire Protection, Equipment, Communications and Training Agreement" with BART. Please summarize the agreement and discuss whether BART will require SFIA to enter into a similar agreement.

**Response.** BART is currently negotiating a "San Francisco Bay Area Rapid Transit District Emergency Procedures Policy Vital Fire Protection, Equipment, Communications and Training Agreement" with every jurisdiction in the project corridor. This agreement is already in place with other jurisdictions located within the existing BART operating system. In addition, complex negotiations are currently taking place between BART and SFIA to develop an emergency guidelines agreement similar to the "San Francisco Bay Area Rapid Transit District Emergency Procedures Vital Fire Protection, Equipment, Communications and Training Agreement." Upon BART and SFIA approval, the emergency procedures agreement will meet or exceed SFIA and FAA aviation security guidelines.

On page 3.5-8, the last paragraph of the DEIR/Technical Appendix is replaced by the following paragraph:

BART is currently negotiating with each jurisdiction in the project corridor to enter into a "San Francisco Bay Area Rapid Transit District Emergency Procedures Policy, Vital Fire Protection Equipment, Communications, and Training Equipment." A liaison would be designated to serve on the BART Fire Liaison Committee and attend bi-monthly coordination meetings with BART Safety Department staff.

24.44. Page 3.5-9, fourth paragraph: The DEIR/[Technical Appendix] statement that potential impacts to police and fire are not considered environmental impacts is not consistent with the CEQA Guidelines. 14 CCR Sec. 15126(a) provides in relevant part that the discussions in an EIR "should include health and safety problems caused by the physical changes, and other aspects of the resource base such as water, scenic quality, and public services." Impact on local jurisdictions' public services, police, fire and emergency services would affect response times, a health and safety concern. Please address the impact on SFIA's police, fire, and emergency services.

**Response.** The impacts of the BART extension alignment on SFIA police, fire, and emergency services are discussed in the DEIR/Technical Appendix in Section 3.5, Community Services and Facilities, on pages 3.5-21 (Alternative IV), 3.5-25 (Design Option V-A), and 3.5-27 (Alternative VI). None of the other alternatives propose stations on SFIA property east of Highway 101.

24.45. Page 3.5-3 [of the DEIR/Technical Appendix], third paragraph: Replace the first and second sentences regarding the SFIA Police Force with the following current information: "The Police Bureau has a current budgeted staff of 267 personnel: 167 sworn officers, 93 police service aides, and 7 civilian support staff. Some of the operational capabilities include traffic patrol, foot patrol, undercover team, narcotics, special management and response team, K-9 explosive detection team, explosive detection disposal team, intelligence team, and ground transportation/certification/enforcement unit. The Bureau participants in the San Mateo County Emergency Road Block System which is put on alert during major criminal incidents."

**Response.** As requested by the commentor, updated information on the SFIA police force is incorporated. Page 3.5-3, paragraph four, sentences one and two of the DEIR/Technical Appendix are replaced by the following:

The SFIA Police Bureau has a current budgeted staff of 267 personnel: 167 sworn officers, 93 police service aids, and 7 civilian support staff. Some of the operational capabilities include traffic patrol, foot patrol, undercover team, narcotics, special management and response team, K-9 explosive detection team, explosive detection disposal team, intelligence team, and ground transportation/certification/enforcement unit. The Bureau participates in the San Mateo County Emergency Road Block System which is put on alert during major criminal incidents.

- 24.46. Page 3.5-9 [of the DEIR/Technical Appendix], last paragraph: Please summarize the increased police and fire needs experienced by Daly City, Richmond and El Cerrito, the cities consulted regarding their respective experiences with BART.

**Response.** A summary of the interviews conducted with local police and fire departments already served by BART is presented in the DEIR/Technical Appendix on page 3.5-11, paragraph one (for police) and on pages 3.5-12 and 3.5-13, under Impact 3 (for fire). Specific details regarding the increase in the calls for service and effects on local services were not quantified by the local service providers.

However, according to the police departments interviewed, a BART station typically generates an increase in traffic during peak commute time and parking demand. These issues are addressed in Section 3.1 of the DEIR/Technical Appendix. None of the local jurisdictions reported receiving complaints from neighborhood residents. The fire departments contacted reported an unquantified increase in calls for service with the exception of the Richmond Fire Department which did not report an increase in service calls related to BART. All three city police and fire departments were able to meet the increased demand for service without an increase in staff or equipment.

- 24.47. Please address the additional impacts and provide a comparative impact analysis that the SFIA Police Bureau could potentially experience under each of the on-Airport build alternatives. It is anticipated that SFIA could be impacted in the following areas: traffic related incidents, criminal-related incidents, medical related incidents, security/equipment related alarms, suspect bomb devices, an increase in the homeless/transient population, and specialized training requirements.

**Response.** The SFIA Police Bureau can expect to receive calls for assistance in dealing with a variety of incidents. The primary types of calls for service are noted on page 3.5-8, paragraph one of the DEIR/Technical Appendix. Of the on-Airport alternatives, only Alternative IV with the Airport Long-Term Parking Station proposes station parking on SFIA property east of Highway 101. Accordingly, this alternative would result in a greater number of calls for auto-related crimes. Since Design Option V-A and Alternative VI would not have parking on SFIA property, the other types of incidents would probably have an equal likelihood of occurring among these on-Airport alternatives.

- 24.48. Please discuss the additional impacts and provide a comparative impact analysis that the SFIA Fire Department could potentially experience under each of the on-Airport build alternatives. Additional SFIA fire department personnel and equipment may be required to supply fire protection, search and rescue, and fire prevention for any on-Airport BART station....Specialized recurrent training would also be required for all fire department personnel, pursuant to an Emergency Response Agreement with BART, for confined space rescue operations in underground vaults and tunnels.

**Response.** The SFIA Fire Department will be called upon to respond to emergencies if any of the on-Airport alternatives are selected. Alternative IV, Design Option V-A.1 and the Aerial Design Option LPA will require specialized equipment and training to deal with BART's proposed aerial

facilities. Likewise, Design Option V-A.2 and Alternative VI will require specialized equipment and training to deal with BART's proposed underground facilities.

- 24.49. Pages 3.13-101 [of the DEIR/Technical Appendix], first paragraph: Please clarify whether construction of Alternative VI would cause project-specific impacts on response times for the SFIA police and fire departments, since the DEIR/[Technical Appendix] only identified cumulative impacts on SFIA police and fire departments. The DEIR/[Technical Appendix] has not identified measures to mitigate the significant cumulative construction impact on the SFIA police and fire departments. For any construction methods except possibly mined tunneling, please specify the additional delay in response time that can be expected for the SFIA police and fire departments under Alternatives IV, V-A and VI, and discuss the impacts of those delays in reaching emergencies at the Terminals and Aircraft Operations Areas (AOA).

**Response.** Construction of Alternative VI is not expected to delay response times by SFIA police and fire departments. Should an emergency occur, however, during the construction, SFIA police and fire services would be called upon to respond. This potential increase in the calls for service is the reason the DEIR/Technical Appendix identifies on page 3.13-101 a potentially significant cumulative construction effect.

- 24.50. Pages 3.5-21, first full paragraph [and] page 3.5-27, final paragraph [of the DEIR/Technical Appendix]: The text should be revised as follows to indicate that the increases in calls to police and fire departments under Alternative IV are in addition to those already identified in the SFIA Master Plan FEIR: "In addition, SFIA police and fire departments would experience an additional increase in calls for service from the proposed Airport Long-Term Parking Station beyond that analyzed in the SFIA Master Plan FEIR. According to the FEIR, the SFIA police and fire departments would already require additional staff to meet the projected short- and long-term needs of SFIA under the Master Plan."

**Response.** To clarify the impacts of the BART extension on SFIA police and fire protection services, page 3.5-21, paragraph one of the DEIR/Technical Appendix is amended as follows:

In addition, SFIA police and fire departments would experience an increase in calls for service from the proposed Airport Long-Term Parking Station beyond that analyzed in the SFIA Master Plan EIR. According to the SFIA Master Plan Final EIR, the SFIA police and fire departments would already require additional staff to meet the projected short- and long-term needs of SFIA under the Master Plan.

- 24.51. Please address the additional impacts and provide a comparative impact analysis that the SFIA Fire Department could potentially experience under each of the on-Airport build alternatives. Additional SFIA fire department personnel and equipment may be required to supply fire protection, search and rescue, and fire prevention for any on-Airport BART station....Specialized recurrent training would also be required for all fire department personnel, pursuant to an Emergency Response Agreement with BART, for confined space rescue operations in underground vaults and tunnels.

**Response.** Increases in calls to police and fire departments under Alternative VI would be in addition to those already identified in the SFIA Master Plan Report. Page 3.5-27, paragraph six, sentence one of the DEIR/Technical Appendix is amended as follows:

In addition, SFIA police and fire departments would experience an increase in calls for service from the proposed Airport International Terminal Station beyond that analyzed in the SFIA Master Plan EIR.

Page 3.5-27, paragraph six, sentence two is amended to read:

According to the *SFIA Master Plan Final EIR*, the SFIA police and fire departments would already require additional staff to meet the projected short- and long-term needs of SFIA regardless of a BART extension under the Master Plan.

- 24.52. Page 3.5-7 [of the DEIR/Technical Appendix]: What is the impact of the on-Airport alternatives on SFIA's sanitary sewer system?

**Response.** The effects of the on-Airport BART alternatives on the SFIA's sanitary sewer system are presented at several locations of the DEIR/Technical Appendix. Wastewater impacts occur because of the station facilities. Consequently, the DEIR/Technical Appendix addresses the SFIA only if a particular BART extension alternative proposes a station that would be connected to the SFIA sanitary sewer system. This condition occurs under Alternative IV (see page 3.5-22), Design Option V-A (page 3.5-26), and Alternative VI (see page 3.5-28). In each case, one station is proposed and is projected to contribute about 4,300 gallons per day to the sanitary sewer system.

- 24.53. Pages 3.13-104 - 3.13-105 [of the DEIR/Technical Appendix]: Construction of Alternatives IV, V-A, and VI could result in utility service disruptions....The DEIR/[Technical Appendix] has not provided an evaluation of potential service interruptions to allow SFIA to determine the potential impacts on operations. Alternatives that would have the greatest potential for utility interruption at SFIA are those that use cut-and-cover construction methods. However, SFIA's policy is to not permit cut-and-cover construction on any portion of active airfield or across any Airport road.

**Response.** There is no planned cut-and-cover construction for the active portions of the airfield. The vent structures for Alternative VI are sited away from apparent taxiways. Any critical utility that would be taken out of service for new BART construction would be transferred to a temporary facility to maintain the utility function. When the BART construction activity has progressed to a point where the SFIA utility could be replaced by a permanent installation, it would then be transferred to the permanent installation, with SFIA concurrence.

- 24.54. Page 3.13-101 et seq: The DEIR/[Technical Appendix] is silent regarding fuel line utilities. Since the DEIR/[Technical Appendix] has not analyzed potential fuel line interruption, the impact on AOA operations has not been assessed. In general, the DEIR/[Technical Appendix] has not analyzed potential construction impacts on utility, sewer, water and fuel lines, and therefore has not provided for adequate mitigation or discussed the probability and likelihood that these construction impacts can be fully mitigated.

**Response.** All significant environmental impacts concerning utility, sewer, water, and fuel lines are identified in the DEIR/Technical Appendix and appropriate mitigation measures are proposed. Coordination meetings have been held between SFIA and BART staff members to identify potential disruptions to airport utilities, and to identify methods to minimize or eliminate these disruptions. For utility lines, the installation of articulated joint connections in advance of construction can protect against settlement-related damage. Mitigation of construction-induced settlement is discussed on pages 3.13-110 through 3.13-112 of the DEIR/Technical Appendix.

- 24.55. Page 3.13-106 [of the DEIR/Technical Appendix], final paragraph: The text should be revised to explain how development of SFIA would have a cumulative effect on utilities with Alternatives IV, V-A and VI.

**Response.** Proposed BART work on SFIA property impacting existing SFIA utilities would be closely coordinated with appropriate SFIA staff. Any utility relocation or modification would be integrated with the current SFIA use of that utility as well as any proposed SFIA changes associated with the SFIA expansion program. This coordination would include design details as well as scheduling and would reduce the impacts to an insignificant level. This same sort of coordination-design-review-scheduling process will be implemented with all other utility owners along the BART project corridor.

24.56. Page 3.6-1 et seq. [of the DEIR/Technical Appendix]:...Any on-Airport alternative must be designed to address and fully mitigate surface settlement impacts at SFIA. Less than full mitigation would adversely impact the Airport's AOA operations, and result in additional maintenance and financial impact for SFIA.

**Response.** The SFIA itself would be responsible for design and construction in the area of active airport operations - east of Highway 101. The SFIA would presumably incorporate adequate design standards in consultation with BART to minimize surface settlement impacts.

24.57. Page 3.13-107 et seq. [of the DEIR/Technical Appendix]: The DEIR/[Technical Appendix] does not include preliminary engineering studies and constructibility reports for any on-airport BART construction. Since airport airfield pavements are subject to heavy concentrated loads (wide body aircrafts), please analyze the impact of aircraft loads on the tunnels during and after construction for the on-Airport alternatives. Please identify the special design criteria that will be used for the tunnel construction.

**Response.** For the Alternative VI Tunnel Alignment, the crown of the tunnel would be located 30 feet below ground surface in firm alluvial soil. An evaluation of the effect of aircraft wheel loading was conducted and found the impact to be minimal, and well within the structural capacity of the lining. This evaluation was reviewed and accepted by SFIA's geotechnical consultant. Special seismic design criteria (ovaling analysis with soil/structure interaction) would be used for the tunnel lining.

24.58. Pages 3.6-25 first paragraph, 3.6-26 final paragraph, 3.6-33 final paragraph, 3.6-36 first paragraph [of the DEIR/Technical Appendix]: The text indicates that the project would, together with development at SFIA, result in the cumulative impact of an increase in the population exposed to seismic hazards due to development. It is not clear why there is an impact contribution from BART since BART is a just a mode of transportation, and is not by itself a destination point attracting travellers. Presumably, passengers would be travelling along the project corridor to get to a desired destination regardless of whether BART was extended. Moreover, as part of the SFIA Master Plan approval, various mitigation measures were adopted that reduce any potential seismic impacts to a level of insignificance. Accordingly, it is unclear why exposure to seismic impacts is considered a cumulative impact. Was this conclusion reflecting an additional risk resulting from passengers being in the tunnel during a seismic movement? Please clarify.

**Response.** Pages 3.6-25, 3.6-33 and 3.6-36 of the DEIR/Technical Appendix discuss cumulative seismic impacts, independent of BART, including increases due to development along the project corridor, increases in air passengers traveling to the airport, and increases in air passengers at the airport as a result of airport expansion.

Tunneling implemented along the BART-San Francisco Airport Extension will be properly designed to take the seismically-induced forces and strain. Therefore, the risk level of being in the tunnel during an earthquake is insignificant.

24.59. Page 3.7-11 et seq. [of the DEIR/Technical Appendix]: The discussion of the alternatives' impact on the San Francisco Garter Snake (SFGS) on the west of Bayshore property is outdated. The DEIR/[Technical Appendix] relies on a five-year old study of the population and habitat of the SFGS (prepared in 1990 and 1991). However, the population of the garter snake had decreased dramatically in comparison with the population count from a prior study conducted in 1983-1985. Based upon the trend evidenced by these two studies, the current presence of the SFGS on the west of Bayshore site is uncertain.

**Response.** The 1983 to 1985 study was conducted during one of the wettest winter seasons in decades and the 1990 to 1991 study was conducted in the fifth year of the five lightest consecutive rainfall years in this century. These differences in rainfall may have resulted in differences in

SFGS habitat and quality, but weather is not the only factor affecting this population. An increase in bullfrogs, trespassers, and poaching may also be responsible for population declines.

The USFWS does not agree with the comment that the information is "outdated." BART attempted to conduct another SFGS trapping survey on the West of Bayshore parcel but was precluded from doing such a study by the USFWS because it believed that such a survey was not necessary and would place the existing SFGS population at risk.

In regard to the comment concerning uncertainty of the current presence of the SFGS on the West of Bayshore parcel, individual SFGS have been observed during recent activities out at the West of Bayshore parcel. In fact, two SFGS were observed during the recent emergency repair of the sewer line by the City of Millbrae in September 1995.

- 24.60. The DEIR/[Technical Appendix] (page 3.13-126, first paragraph) states that "it is not possible to accurately estimate the number of individual snakes and/or red-legged frogs that could be lost as a result of construction activities" because of "the lack of more recent information on the populations of these species." Please explain why a more recent study of the population was not conducted.

**Response.** Please refer to Response 24.59 for an explanation for the SFGS. As for the California red-legged frog, a specific survey for this species on the West of Bayshore was conducted in 1993. Please refer also to Response 54.20.

- 24.61. Pages 3.7-44 [of the DEIR/Technical Appendix], fourth paragraph:...Since the "no build" alternative would have a significant impact on the SFGS without mitigation because it would allow the current trend of species population decline to continue, would this conclusion apply equally to Alternative VI? Please clarify.

**Response.** The conclusion is based on the assumption that mitigation would not be provided in the absence of BART construction activities, and therefore the existing factors contributing to decline of the species would continue. The conclusion reached for the No Build Alternative does not apply to Alternative VI. Even in Alternative VI or its Aerial Design Option, mitigation measures have been proposed to compensate for potential impacts on the SFGS that construction activities in the immediate area. These mitigation measures have been developed in consultation with the USFWS, and are designed to eliminate specific problems and risks to the SFGS that currently exist on the site. Please refer to Response 4.4 for a discussion of potential mitigation measures.

- 24.62. Page 3.7-38 [of the DEIR/Technical Appendix]: BART proposes to use onsite retention ponds to retain rain runoff (page 3.8-14). Since the construction of retention ponds require land space, please indicate whether the DEIR/SDEIS has factored in this land usage when considering the total acreage of wetlands that will be disturbed under the [1992] LPA.

**Response.** The use of retention ponds is recommended in the DEIR/SDEIS to mitigate flooding impacts. The acreage associated with this flood control measure has not, however, been factored into total acreage of disturbed wetlands for the 1992 LPA. To minimize the potential for this to occur, on page 3.8-14, paragraph five (Mitigation Measure 3.2, Onsite Storage) of the DEIR/Technical Appendix, the following text has been added after the last sentence:

All retention ponds or subsurface structures will be sited to avoid any disturbance of existing wetland habitats.

- 24.63. Page 3.7-42 [of the DEIR/Technical Appendix], second paragraph: For each alternative that would require a Habitat Restoration Plan for the SFGS on SFIA's west of Bayshore property, please identify who would be responsible for the cost of the SFGS habitat construction and maintenance.

**Response.** As indicated in Response 4.4 to comments by the California Department of Fish and Game, the proposed Habitat Restoration Plan would not be adequate mitigation for the expected impacts to the SFGS. However, the other habitat enhancement measures acceptable to the USFWS and CDFG are defined in the Biological Assessment and Biological Opinion in Volume V of this FEIR/FEIS. BART would pay for the cost of construction and monitoring of the enhanced habitats.

- 24.64. Page 2.93 [of the DEIR/Technical Appendix]: Does Table 2.4-2 take into account the areas that may be disturbed due to construction activities, such as working space needed for driving poles, constructing pile caps and footing, as well as construction access points?

**Response.** Construction-related impacts to biological resources are discussed in detail in Section 3.13, pages 3.13-120 through 3.13-145 of the DEIR/Technical Appendix. Each of the specific construction activities identified in the comment was addressed in the impact analysis and appropriate and specific mitigation measures to avoid, minimize or compensate for those construction impacts identified.

- 24.65. Page 3.7-44, third full paragraph; page. 3.7-59, first paragraph: The DEIR[/Technical Appendix] discusses in its cumulative impacts analysis that the expansion of Parking Lot D under the SFIA Master Plan would result in the loss of wetlands. The reference to Parking Lot D is an error. There are no wetlands on the Lot D site. The reference is made to a portion of the Lot DD site. However, the Lot DD parking garage is currently under construction on the site of an existing paved parking area, and no wetlands are impacted by this project. Please revise the DEIR/SDEIS accordingly by deleting these paragraphs.

**Response.** Upon further review of the San Francisco International Airport Master Plan, the paragraphs noted are deleted.

- 24.66. Page 3.13-145 [of the DEIR/Technical Appendix], third full paragraph: The SFIA Master Plan does not include any short-term projects that have potential impacts on biological resources. This reference should be deleted.

**Response.** The future SFIA expansion described in this paragraph refers not to the SFIA Master Plan projects, but rather SFIA plans, communicated to BART by SFIA staff as recently as May 1995, to develop the site west of Bayshore.

- 24.67. Page 3.8-1 et seq. [of the DEIR/Technical Appendix]: It is not possible to determine from the DEIR/SDEIS whether the proposed means of accommodating storm water on SFIA property from each on-Airport alternative is adequate. Please clarify.

**Response.** Preliminary engineering is currently evaluating the impacts of constructing BART facilities in the 100-year flood plain. The adequacy of proposed mitigation measures to accommodate displaced storm water is being determined by that evaluation, as well as through on-going discussions among and between BART, the Flood Control District, Caltrans, and the other relevant municipalities. Please refer to Response 72.243 for a discussion of possible flooding.

- 24.68. Page 3.8-12, second full paragraph: The DEIR/SDEIS proposes the later commission of a hydrology study to mitigate the impacts of locating the LPA's Hickey and Airport Intermodal station in the 100-year flood plain. However, as case law has held, a commitment to study an environmental impact is not sufficient mitigation under CEQA, and there is no substantiation that the significant impact has been fully mitigated.

**Response.** All significant environmental impacts concerning the location of the Hickey and Airport intermodal stations in the 100-year flood plain under the LPA have been identified in the

DEIR/Technical Appendix at page 3.8-11. Mitigation Measure 1.1 proposes two alternative approaches to develop a safe elevation of these BART facilities above flood levels. Under one possible approach, a hydrology study conducted during the preliminary engineering design would be used to refine the final design. Alternatively, the final design may be based upon the maximum FEMA flood level. Implementation of either one of these measures would reduce the impact of flooding to an insignificant level.

- 24.69. Page 3.9-32 [of the DEIR/Technical Appendix], second to last paragraph: The last sentence should be revised to state: "This reduction in aircraft noise is expected due to noise abatement efforts described in the SFIA Master Plan and the gradual shift to quieter aircraft required by SFIA regulations and federal law."

**Response.** To clarify the source of future noise reductions at the SFIA, page 3.9-32, paragraph four, sentence three of the DEIR/Technical Appendix is amended as follows:

This reduction in aircraft noise is expected due to noise abatement efforts described in the SFIA Master Plan and the gradual shift to quieter aircraft required by SFIA regulations and federal law.

- 24.70. Page 3.11-1 et seq. [of the DEIR/Technical Appendix]: Petroleum product and solvent contamination presence at SFIA is suspected at various locations under Alternatives IV, V, V-A, V-B and VI. The remediation of the contamination at those sites will potentially have direct impacts on AOA operations in air cargo, non-terminal airline support and passenger terminal facilities. In addition to impacts on Airport operations, BART's remediation and construction on Airport property could also affect the SFIA Master Plan schedule and SFIA's own remediation program. The DEIR/SDEIS should analyze these impacts as well as the cumulative impacts of the construction of the SFIA Master Plan and propose mitigation measures. Implementation of contingency plans and site sampling must take place in order to properly analyze the extent of the impact.

**Response.** Under the terms of the California Regional Water Quality Board, Order 95-018, Site Cleanup Requirements, dated January 18, 1995, SFIA and its tenants are currently required to remediate contaminated areas within the Airport. This work is scheduled to be completed within the SFIA Master Plan Schedule, and prior to the start of construction for BART facilities.

BART will coordinate its design and construction efforts on SFIA property with the RWQCB so that this construction does not violate the terms of Order 95-018, specifically that "further significant migration of pollutants through subsurface to waters of the State is prohibited."

If un-remediated contamination is encountered during BART construction operations on SFIA property, the procedures for handling hazardous materials and protecting workers, and public health and safety would be in accordance with the mitigation measures detailed on pages 3.13-206 through 3.13-215 of the DEIR/Technical Appendix.

- 24.71. Under Alternatives IV, V-A, and VI, subway sections of the BART line on SFIA property may impact the integrity of the Bay Mud Aquitard. During construction, excavation on Airport property located east of Bayshore could penetrate the Bay Mud and may provide a conduit for environmental contaminants to impact the Westside Basin Aquifer...The dewatering systems typically needed for below-grade cuts of subway construction could result in the migration of contaminated groundwater from surrounding areas into the proposed alignments. Under Alternative VI, the proposed route of the BART alignment through and under the existing UAL Service Center would encounter existing concrete piles in an area of known contamination. The DEIR/SDEIS has not addressed these potential impacts.

**Response.** As part of the planning process, a detailed review of available environmental and geotechnical data for areas within and adjacent to SFIA has been conducted. This review shows that the proposed Alternative VI tunnel alignment would be located well below the Bay Mud Aquitard, would not penetrate it, and therefore would not affect it as a seepage barrier. This will be confirmed by site-specific geotechnical studies performed during project design.

Penetration of the Bay Mud Aquitard would occur under alternatives incorporating ventilation shafts and the cut-and-cover station. Where such facilities are located, sealants to maintain the integrity of the Bay Mud Aquitard, such as slurry walls, sealing grout, or other appropriate methods, will be used. The appropriate sealant will be selected based on the results of site-specific geotechnical investigations performed during final project design.

Dewatering for construction of ventilation shafts and the cut-and-cover station will be performed inside a positive seepage barrier such as slurry walls to prevent drawdown-induced settlement of adjacent structures and to prevent migration of groundwater.

With respect to removal of existing piles at the UAL Service Center, a detailed construction plan and sequence to prevent cross-contamination has been developed and submitted to SFIA. The plan features the use of large-diameter steel casing sleeves and grouting performed simultaneously with pile withdrawal to fill voids created by removal.

- 24.72. If contaminants were discovered, the DEIR/[Technical Appendix] states on page 3.11-10 that BART would inform the relevant regulatory agencies with jurisdiction, and that the responsible landowners would then perform additional investigation and mitigation or cleanup as required by the responsible regulatory agencies. It is SFIA's policy that BART and not SFIA is responsible for the investigation and remediation of all hazardous materials on Airport property necessitated by the BART extension project.

**Response.** The Airport "policy" is inconsistent with the requirements of applicable laws and regulations. As stated on page 3.11.10 of the DEIR/Technical Appendix, these laws hold landowners responsible for investigation and remediation of hazardous materials on their property.

- 24.73. Page 3.13-206 et seq. [of the DEIR/Technical Appendix]: The DEIR has not addressed the impacts of handling or encountering hazardous materials in a tunnel and procedures for the protection of affected workers.

**Response.** Procedures for handling hazardous materials in a tunnel are no different than those that will be followed in other physical settings. BART will adhere to all local, state, and federal requirements for handling, use, storage, treatment, transport, and disposal of hazardous materials. Applicable regulations and enforcement agencies are described on pages 3.11-6 through 3.11-10 of the DEIR/Technical Appendix. No significant impacts to public health and safety are anticipated under any of the project alternatives from the minimal volumes and concentrations of hazardous materials that would be used by BART (see Impact 1 on page 3.11-16 through 3.11-18 for the 1992 LPA).

- 24.74. Page 3.13-213, last paragraph; page 3.13-214, fourth full paragraph [of the DEIR/Technical Appendix]: Under Alternatives V-A and VI, there is a potential that the extension under SFIA property could cause the rupture of fuel pipelines or underground tanks. Please provide further information of the tank-locating technologies that would be used by BART and how that would reduce the impact to an insignificant level.

**Response.** Tank-locating methods could include review of existing utility mapping, tenant interviews, site inspections, remote sensing by electro-magnetic methods, remote sensing by ground-penetrating radar, and probing in advance of excavation. Decisions on methods to be used

would be made after project selection and further study. If uncertainties still exist, active pipelines could be closed and purged in critical areas, and low impact construction techniques employed.

- 24.75. The DEIR/SDEIS has not...identified the portions of the BART alignments that are proposed to be constructed in a cut-and-cover configuration or subway tunnel on Airport property and has not analyzed the impacts of each of the configuration techniques on SFIA. For Alternative VI...the DEIR/SDEIS has not discussed nor analyzed [the mined tunnel] construction alternative.

**Response.** Under Alternative VI, construction on SFIA property is proposed by tunneling, except at the Airport International Terminal Station and ventilation structures, to minimize impact on surface facilities (refer to Design Appendix drawings on pages 79, 80, 81, 82).

Surface impacts from tunneling would consist of minor settlement along the route of the tunneling. This surface settlement would result in a shallow trough (typically, two to three inches deep) spread out over a wide area (typically, 100 feet or more). Settlement would be controlled by careful monitoring of the tunnel boring machine operational procedures, and careful monitoring of the surface for evidence of settlement. If settlement were to exceed previously agreed-upon limits, the tunneling work would be stopped and permission to resume would be withheld until corrective procedures could be implemented.

Surface impacts at the locations of the cut-and-cover crossover structures and station would be severe. The impacts would be partially mitigated by routing construction traffic to avoid airport traffic, and by scheduling construction activity around the site to occur at airport off-peak times. These impacts would nevertheless remain significant and unavoidable.

- 24.76. Page 3.13-6, fourth paragraph [of the DEIR/Technical Appendix]: Since the Airport is undertaking major construction of its Master Plan, there is limited if any areas to provide BART for on-site construction/contractor "laydown" areas. Areas needed by BART for construction offices, storage yards, equipment, etc. will primarily have to be accommodated outside of the Airport's east of Bayshore property.

**Response.** The major contractor laydown area proposed on SFIA property is shown on the Design Appendix drawing on page 79. This site is not on the Airport's east-of-Bayshore property. This area and other minor laydown areas on SFIA are described on page 3.13-8 of the DEIR/Technical Appendix. During inter-agency technical coordination meetings, SFIA staff advised BART that adequate contractor laydown areas would be made available in areas already dedicated for this purpose.

- 24.77. In those cases where construction workers must still come on Airport property for the on-Airport alternatives, the DEIR/SDEIS has not identified the parking demand generated by construction workers and where those workers would park their vehicles.

**Response.** The peak number of construction staff required to be on SFIA property to the east of Highway 101 is estimated to be between 50 and 60 workers. The location of the parking area for these workers would be on SFIA property and the workers would be driven to the work site via a shuttle van provided by the project sponsors. Alternative parking sites include space within the long term parking lot on McDonnell Road or a new temporary parking lot that would accommodate approximately 60 spaces, such as to the east of the long term lot.

- 24.78. Page 3.13-10 [of the DEIR/Technical Appendix]: Does Table 3.13-2 on road closures factor in cumulative traffic congestion? It is unclear whether the DEIR/SDEIS has analyzed the impacts of road closures of 9 to 30 months.

**Response.** Table 3.13-2, Roadway Closures, in the DEIR/Technical Appendix contains information on the BART-SFIA Extension and does not include cumulative impacts related to the

construction of the SFIA Master Plan projects. SFIA terminal access roads would not be closed during construction of the BART-SFIA Extension under Alternative VI.

Table 3.13-2 is updated to include the airport access roads which will be impacted by the construction of the cut-and-cover Airport station under Alternative VI. The following information is added to the table, which is on page 3.13-10 of the DEIR/Technical Appendix.

The following new Impact 18 to Alternative VI is added on page 3.13-52 of the DEIR/Technical Appendix:

*18. Construction of the Airport International Terminal Station would impact existing access roads, but existing flows can be maintained without significant delays. (I)*

Existing traffic flows would be maintained at all times by constructing temporary detours on the two sides and in the median to allow all lanes of traffic to be taken out of service two lanes at a time for a period of one month for each two-lane detour. During this time, the slurry wall would be installed, the upper 10 feet of fill removed, a temporary deck installed, and the lanes returned to traffic.

The additional detour lanes would insure that the existing ten lanes of traffic would not be reduced during the decking operation. Lane Channelizing and signing would be done at night to direct the traffic around the decking operation. The entire operation would be coordinated with the traffic detours required by the construction of the new international terminal.

With traffic operating on temporary decking on all lanes as described above, the end slurry walls would be completed, the box excavated and braced, the invert slab placed, the subway box structure installed, utilities reinstalled, and backfill installed.

This construction plan has proven to be an effective mitigation to traffic disruption on every major subway construction in the United States.

All of the work associated with SFIA access roads would be accomplished in conjunction with the planned SFIA International Terminal and Ground Transportation Center. Because of this association, there would be no net increase in the impact to the normal airport traffic during this phase. BART construction affecting the terminal access roads would last for approximately five months. This work would be performed sometime during a 12- to 18-month period of construction by SFIA on the new International Terminal. The timing of this five-month disruption to the airport terminal access roadway would be coordinated to complete required construction on both the Airport International Terminal Station under Alternative VI as well as the new International Terminal, thus avoiding a cumulative traffic impact. SFIA staff have stated that the BART extension would not be permitted to perform this roadway channelization unless the work were to be coordinated with the new International Terminal construction. The channelization of the airport terminal access roadway for both projects would not cause a significant impact because traffic at the points of channelization would already be traveling at relatively slow speeds. Eastbound traffic approaching the terminal, immediately to the west of the airport terminal parking garage would be slowing, primarily due to weaving of vehicles. Westbound traffic leaving the airport terminal is also traveling at slow speeds in order to negotiate the terminal loop roadway.

- 24.79. Pages 3.13-52, 3.13-67, 3.13-96, 3.13-101, 3.13-120, 3.13-156, 3.13-206, 3.13-215, 3.13-219: Although the DEIR/[Technical Appendix] acknowledges the SFIA Master Plan as a project to be considered in its cumulative impact analysis, the DEIR/[Technical Appendix] has not analyzed the combined effects of constructing the BART project while SFIA is constructing the Master Plan projects. In particular, the DEIR/SDEIS has not considered the cumulative impact on traffic, Airport property, and on the Airport's airfield and landside operations.

**Table 3.13-2**  
**Roadway Lane Closures**

Street Name	Traffic Lanes Existing/ Decked	Approximate Duration of Lane Restrictions	Approximate Construction Time	Applicable Alternatives	Comments
Hillcrest Boulevard	<u>0/2</u> <u>2/0</u>	<u>1 month (One month will be required to construct the new intersection of Hillcrest with Aviator)</u>	<u>1 month (One month will be required to construct the new intersection of Hillcrest with Aviator)</u>	VI	New road extension to replace Rollins Road access to Bayside Manor neighborhood.
SFIA Airport Access Roads	<u>10/2</u>	<u>5 months for all 10 lanes</u>	<u>24 months</u>	VI	<u>Install detours in median and on outside; remove two lanes of traffic at a time to install slurry walls and temporary roadway decking.</u> <u>Total time to install and remove two lanes of roadway decking: one month.</u>

**Response.** The DEIR/Technical Appendix analyzes potential cumulative impacts relating to construction of the BART-San Francisco Airport Extension, including the Alternative VI LPA. However, at the time the DEIR/SDEIS was released, the actual phasing of construction of the SFIA Master Plan was too conceptual for purposes of assessing cumulative construction traffic impacts. Accordingly, the cumulative construction-related impacts from concurrent construction of the BART-San Francisco Airport Extension project and the SFIA Master Plan projects could not be quantified further because the quantity and phasing of airport-related construction activities are not contained in the SFIA Master Plan FEIR and has not been made available by the SFIA. Nevertheless, an analysis was performed based on the information available.

If direct access to Highway 101 from the City of San Bruno crosses SFIA property west of Highway 101 is approved, coordination with the SFIA ramp improvements would be required. Such coordination would be achieved through the Caltrans permitting process. Please refer to Response 24.78 for a discussion of cumulative traffic impacts at the SFIA under Alternative VI and to Response 24.28 for a discussion of cumulative traffic impacts related to the SFIA ramps project under Design Option V-A. Construction truck traffic to the BART-San Francisco Airport Extension on SFIA property would not combine with SFIA-related traffic to cause cumulative impacts because the construction traffic would not use the airport terminal access roadways to and from Highway 101, but would use McDonnell Road and Road R-2 to gain access to Highway 101.

Other types of cumulative impacts related to the SFIA Master Plan expansion, in addition to traffic impacts, are addressed in the DEIR/Technical Appendix. Under the analysis of land use impacts, cumulative impacts on the character of the airport community would occur on a short-term basis if

any of the BART build alternatives are built concurrently with expansion activities at the SFIA as described on page 3.13-67 of the DEIR/Technical Appendix. Coordination with the SFIA would partially reduce the cumulative land use impacts but these impacts would remain significant. SFIA police and fire departments would be potentially affected by cumulative impacts from concurrent construction of the BART and SFIA projects as described on page 3.13-101. The SFIA police and fire departments would be informed by the project sponsors of proposed construction plans as well as road closures and would work to achieve a mutually acceptable traffic detour/rerouting plan. Utility service interruptions in the vicinity of the project corridor would potentially have cumulative impacts from concurrent construction of the BART and SFIA projects and would be mitigated through the timing of service disruptions and provision of temporary backup service as described on page 3.13-106 of the DEIR/Technical Appendix. Cumulative settlement and erosion impacts could occur with the BART build alternatives that traverse SFIA property east of Highway 101 with concurrent construction of the SFIA expansion. These settlement and erosion impacts would be mitigated through proper construction techniques employed by each project as described on page 3.13-120 of the DEIR/Technical Appendix. Noise from construction activity from the SFIA Master Plan projects and the BART-San Francisco Airport Extension would be expected to increase noise levels at the SFIA; however, such increases would be unlikely to raise the ambient noise levels to create a significant effect because of the already high background levels. Finally, cumulative air quality impacts would occur with concurrent construction of the BART and SFIA projects under Alternatives IV, VI, and Design Option V-A that would partially be reduced through specific measures but would still temporarily exceed state or federal criteria as described on page 3.13-206 of the DEIR/Technical Appendix.

The disruption of Airport surface operations under the Alternative VI LPA would be minimized by tunnel boring subway construction and the location of the tunnel mobilization area for material handling and storage off SFIA property. Implementation of the construction plan described in Impact 18 (please refer to Response 24.78) would mitigate the traffic impacts on the access roads. The balance of the construction impacts under the Alternative VI LPA would be mitigated by SFIA's design and construction of the slurry wall box, excavation and bracing, temporary decking, and bottom slab placement for the BART Airport Station and the two ventilation shafts on the east side of Highway 101. As discussed above, construction of the BART-San Francisco Airport Extension on SFIA property would be performed in a manner to prevent significant traffic, airside, and landside impacts and, based on discussions with airport staff, SFIA will construct its planned improvements in a manner also to avoid these impacts.

- 24.80. The FAA confirmed that the use of airport revenue to pay for specific elements of the construction of BART facilities of SFIA would not be an improper diversion of revenue....The Financial Analysis section in the DEIR/SDEIS requires revision to reflect the FAA's determination of expending Airport funds on the BART project.

**Response.** Chapter 6, Financial Analysis, of the DEIR/SDEIS indicates that various resources are available to SFIA to support the BART extension on airport property. Chapter 6 text is in agreement with the FAA's determination of eligibility.

- 24.81. Page 6-2: Table 6-1 [of the Summary DEIR/SDEIS], providing the estimated capital costs for each of the alternatives, does not reflect the cost for remediation of hazardous materials. A financial comparison of the alternatives is incomplete without factoring in the remediation costs.

**Response.** Should hazardous materials be discovered during construction, those parties responsible for the contamination will be identified and all applicable laws complied with.

- 24.82. Page 6-2 [of the Summary DEIR/SDEIS]: In Table 6-1 (Estimated Capital Costs) no mention is made of the capital costs to be incurred by the Airport to accommodate BART in Alternative VI and Design Option V-A. These costs (design as well as construction, etc.) for enabling the BART project to interface with the New International Terminal and the GTC should be identified in the "Costs Covered by Others" section.

**Response.** At the time the DEIR/SDEIS was prepared, the capital costs for the airport interface were too speculative to estimate. For the Aerial Design Option, it is anticipated that the capital costs for the interface will be covered by the SFIA's \$200 million maximum contribution. Memoranda of Understanding and contracts will be entered into as appropriate regarding allocation of specific costs.

- 24.83. The DEIR/SDEIS should note that SFIA's financial contribution has been defined and capped and that there are significant restrictions on the use of airport revenues. (page 6-5, Table 6-3)

**Response.** Since publication of the DEIR/SDEIS, the contribution from the Airport has been capped at \$200 million. Updated discussion of Airport financial contributions and restrictions is included in the Financial Analysis of the FEIR/FEIS. Please see Response 14.93 for a discussion of financial information in an environmental document.

- 24.84. Page 6-9, first full paragraph: The DEIR/[Technical Appendix] identifies \$10 million in SFIA entitlement funds for FY 1996 as a possible funding source. However, entitlement funds are restricted for repair and maintenance of runways, taxiways and other Airport infrastructure.

**Response.** The DEIR/Technical Appendix did not intend to imply that the estimated \$10 million in annual entitlement funds that SFIA could receive would be used as a possible funding source for BART facilities. The following sentence is inserted on page 6-9, paragraph one, after sentence two:

Entitlement funds, however, are used principally for the repair and maintenance of runways, taxiways and other Airport infrastructure.

- 24.85. Page 6-10, second full paragraph: The DEIR/[Technical Appendix] identifies SFIA as a potential local source of funding to cover the 25 percent local match unmet by the SamTrans contribution. Airport funds, and specifically PFCs, cannot be used to subsidize the local matching share unmet by SamTrans contribution. Federal restrictions prohibit Airport funds, including PFC funds, to be used off Airport.

**Response.** Restrictions on the uses of various Airport funds were taken into account when the proposed financial plan was developed. SFIA management requested that the SFIA, not BART, determine how the \$200 million contribution (maximum) to Alternative VI or Aerial Design Option LPA would be funded. BART and SamTrans did not propose, or intend it to be understood, that airport funds, including PFC funds, would be used off-airport.

See Response 14.93 for a discussion of the financial plan included in the DEIR/SDEIS, and the Financial Analysis in Volume I of this FEIR/FEIS document for the currently proposed financial plan for the project.

- 24.86. [Page 6-10 third full paragraph of the DEIR/Technical Appendix:] The text in the third paragraph indicates that SFIA can use operating revenues it generates for on-airport transportation systems, including the BART extension. SFIA's grant agreements with the federal government contain significant restrictions on the use of SFIA operating revenues. Accordingly, to more accurately reflect the restrictions on SFIA's use of operating revenues the first sentence should be revised as follows: "SFIA can use operating revenues it generates for certain on-Airport transportation systems, potentially including portions of the BART extension."

**Response.** To more accurately acknowledge restrictions of SFIA's operating revenues page 6-10, paragraph three, sentence one of the DEIR/Technical Appendix is amended as follows:

SFIA can use operating revenues it generates for certain on-airport transportation systems, potentially including portions of the BART extension.

- 24.87. Page 6-11, Table 6-6, page 6-14, Table 6-8 [of the Technical Appendix]: Same comment relating to page 6-10, third full paragraph, above. In addition, SFIA cannot be a potential source of revenue for transit capital, transit operations/maintenance, and highway and streets capital.

**Response.** The referenced DEIR/Technical Appendix tables were not intended to indicate that Airport funds would be used to cover transit capital, transit operations/maintenance, or highway and streets capital. The following footnote is added to Tables 6-6, 6-7 and 6-8:

- 1) Airport funds can be used only for eligible on-Airport portions of the BART-San Francisco Airport Extension.

- 24.88. Page 6-13, Table 6-7 [of the DEIR/Technical Appendix]: Same comment relating to Table 6-3, above.

**Response.** Please refer to Response 24.83 on SFIA as a potential source for required uncommitted funds.

- 24.89. Page 6-14 [of the DEIR/Technical Appendix]: Table 6-8 identifies SFIA as a potential source of revenue for the BART project and the amount levied from SFIA would be "as needed." Potential funds from SFIA are defined and limited, and not on an "as needed" basis.

**Response.** Please refer to Response 24.87 for a discussion of the limitations on using SFIA funds.

- 24.90. Page 6-10, third paragraph: The DEIR/[Technical Appendix] states that "up to one year could elapse before such revenues begin to flow to the SFIA." In reality, considering the PFC approval process, the timing of collections by the airlines and remittance to the Airport and the required appropriation of funds by the Board of Supervisors, more than a year would be required before any PFC revenues could be disbursed to BART from the time a decision was made to pursue PFCs.

**Response.** Page 6-10, paragraph three, sentence five of the DEIR/Technical Appendix is revised as follows:

Application to the FAA for approval to impose a PFC would be made by SFIA; up to one more than a year could elapse before such revenues begin to flow to the SFIA any PFC revenues could be available for the BART project.

- 24.91. Page 6-12, second paragraph [of the DEIR/Technical Appendix]: The City and County of San Francisco had previously explored the possibility of imposing a regional jet fuel tax as an additional Airport revenue source. It was determined that the Airport is legally prohibited by the Lease and Use Agreement between SFIA and the airlines, as well as by federal and state laws, from imposing this tax.

**Response.** The DEIR/Technical Appendix is revised to delete the reference to regional jet fuel tax in the fourth bullet on page 6-12.

- 24.92. Page A-1, third definition [of the DEIR/Technical Appendix]: To more accurately reflect the Airport Light Rail System, as described on pages 55-56 of the SFIA Master Plan EIR, the definition should be revised as follows: "The transit system, consisting of a dual fixed guideway alignment with trains moving in both directions, would be constructed by SFIA in two phases. In

the first phase (1996), SFIA will construct the system from the new Ground Transportation Center to the SFIA terminal building and extend the system from the Ground Transportation Center to parking lots D and DD. In the long-term (by 2006), the system is proposed to be connected to the ferry terminal and the FBO commuter facility on the east side of the Airport."

**Response.** To make the definition of the ALRS consistent with the SFIA Master Plan FEIR, the Glossary at page A-1 of the DEIR/Technical Appendix is revised as follows:

The transit system, consisting of a dual fixed guideway alignment with trains moving in both directions, would be constructed by SFIA in two phases. In the first phase (1996), SFIA will construct the system from the Ground Transportation Center to parking lots D and DD. In the long-term (by 2006), the system is proposed to be connected to the ferry terminal and the FBO commuter facility on the east side of the Airport proposed to be constructed by the San Francisco International Airport in two phases, connecting the terminals and proposed Ground Transportation Center (GTC) with adjacent and remote parking facilities, nearby transit systems, proposed Ferry Service, and General Aviation Terminals. (Also called a "people mover," "automated guideway transit," or "monorail").

- 24.93. Page 1-10, Table 1-3 [of the Summary DEIR/SDEIS]: This table indicates that the FAA may have to approve the alternatives that go into SFIA. The table should be corrected to indicate that the BART extension must be depicted on the SFIA airport layout plan and approved by the FAA in accordance with the provisions of 49 U.S.C. section 47101 et seq. and the airport's current grant agreement assurances.

**Response.** BART understands that if the selected alternative does traverse SFIA property east of Highway 101, SFIA must include the major features of BART on their Airport Layout Plan and submit the Plan to FAA. Accordingly, on page 1-11 of the DEIR/Technical Appendix, the "type of review approval" for FAA is modified as follows:

Possible approvals Submission and approval of revised SFIA airport layout plan for those alternatives into SFIA.

- 24.94. Page 1-11, Table 1-3 [of the DEIR/Technical Appendix]: "San Francisco International Airport Commission" should read "San Francisco Airports Commission." (This comment is applicable throughout the DEIR/SDEIS, as required.) To more accurately reflect the approvals required by the San Francisco Airports Commission, the phase "approval of BART facilities on Airport property" should be revised to read: "Approval of BART construction, facilities and operations on Airport property and any funding thereof by SFIA."

**Response.** The commentor's remarks related to changing the name of the "San Francisco International Airport Commission" to the "San Francisco Airports Commission" is correct and will be applied throughout the DEIR/SDEIS, as required. The DEIR/Technical Appendix text on page 1-12, Table 1-3, under Local Agencies, is revised as follows:

Coordination, planning, and construction of Airport Light Rail System connection to BART; possible funding source; approval of BART construction, facilities and operations on airport property.

- 24.95. Page 2-3, second paragraph [of the Summary DEIR/SDEIS]: For accuracy, the second sentence should be revised to state that the ALRS is part of the SFIA Master Plan.

**Response.** Page 2-13, paragraph four, sentence four of the DEIR/Technical Appendix is amended as follows:

~~An As part of the SFIA Master Plan, an Airport Light Rail System (ALRS), to would be constructed and operated by the SFIA, and would connect the BART/CalTrain station with the SFIA Terminals and employment sites.~~

- 24.96. Page 3-2, second paragraph [of the Summary DEIR/SDEIS]: This paragraph should be revised to describe in detail the Master Plan EIR certified by the San Francisco Planning Commission on May 28, 1992 and the accompanying Mitigation Plan approved by the Airports Commission in November, 1992.

**Response.** The SFIA Master Plan is described starting on page 3.2-25 of the DEIR/Technical Appendix.

- 24.97. Page 3.4-12, first full paragraph [of the Summary DEIR/SDEIS document]: To more accurately reflect the potential impacts of the SFIA Master Plan on cultural resources, replace the word "would" with "could" in the third sentence. In the fourth sentence, the word "potential" should be inserted before "cumulative."

**Response.** Based upon the commentor's recommended edit pertaining to the SFIA Master Plan's potential impacts on cultural resources, page 3.4-12 paragraph one, sentence three of the Summary DEIR/SDEIS is revised as follows:

The SFIA Master Plan improvements ~~would~~ could result in direct effects on SFIA property.....

Page 3.4-12, paragraph one, sentence four of the Summary DEIR/SDEIS is revised as follows:

Thus, these BART alternatives would not contribute to ~~potential~~ cumulative cultural effects at SFIA.

- 24.98. Page 3.5-13, third full paragraph [of the Summary DEIR/SDEIS]: To more accurately reflect the text of the SFIA Master Plan FEIR, replace the word "should" with "could" in the third sentence.

**Response.** Paragraph three, sentence two on page 3.5-23 of the DEIR/Technical Appendix is modified as follows in response to the commentor's correct suggestion.

According to the *SFIA Master Plan Final EIR*, the SFWD may be able to meet the SFIA's long-term demand, but water conservation measures ~~should~~ could be implemented.

- 24.99. [Page 3.5-13, third full paragraph of the Summary DEIR/SDEIS: ...This paragraph should clarify whether the estimates of sewer usage assume implementation of the water conservation measures.

**Response.** The estimates of sewer and water usage were based upon flows measured at other BART stations. Water conservation measures were recommended because the SFIA Master Plan water demand projections did not include conservation measures. Please refer to Response 24.98.

- 24.100. Page 3.7-7, third paragraph [of the Summary DEIR/SDEIS]: The reference to permits under Section 9 of the Endangered Species Act in this paragraph and throughout this section is incorrect and should be changed to Section 7. Section 7 is brought into play when a federal agency, in this case, the Army Corps of Engineers, is issuing a permit. Section 9 relates to private parties, who must obtain permits under Section 10 of the Act.

**Response.** Section 9 of the Endangered Species Act and its implementing regulations comprehensively prohibit the "take" of a federally listed fish and wildlife species by any party. Take incidental to an otherwise lawful activity may be authorized by one of two procedures. If a Federal agency is involved with the permitting, funding or carrying out of a project, consultation pursuant to Section 7 is required. If a Federal agency is not involved with the project, then an "incidental take" permit pursuant to Section 10(a) of the Act would be obtained.

- 24.101. Page S-4, third paragraph [of the Executive Summary]: The text incorrectly indicates that the SFIA Master Plan will increase the number of annual air passengers by 70 percent. The SFIA Master Plan itself does not increase the number of annual air passengers to SFIA; rather it proposes changes to landside facilities to better accommodate the air passenger growth that is projected to occur with or without the SFIA Master Plan. Accordingly, the first sentence should be revised as follows: "SFIA has recently embarked upon a major expansion program designed to accommodate a projected increase of annual air passengers of approximately 70 percent between 1990 and 2006."

**Response.** The recommended edits to the Executive Summary of the Summary DEIR/SDEIS regarding projected annual air passenger growth at SFIA occur on page S-4, paragraph three, sentence one:

SFIA has recently embarked upon a major expansion program that will increase the number designed to accommodate a projected increase of annual air passengers of approximately 70 percent between 1990 and 2006.

- 24.102. Page 5-8 [of the Hazardous Materials Technical Report], third bullet: Pan Am Hangar (Plot 1) -- The soil on this site has been partially remediated by United Airlines to less than 50 ppm of hydrocarbons to permit construction activities to proceed safely. The site will be fully remediated when the intermediate use (rental car parking) is removed....The Hazardous Materials Technical Report should be updated by the inclusion of [this] information.

**Response.** The status of remedial activities at the Pan Am hangar (Plot I) site at SFIA is noted.

- 24.103. Page 5-9, [of the Hazardous Materials Technical Report], second bullet: North and South Oxidation Ponds -- The North Pond is out of service. The South Pond has pumps which connect to the adjacent canal. This permits the canal to be emptied should a fuel spill occur which drains into the canal. [Please include this information.]

**Response.** The information provided by the commentor regarding the North and South Ponds is noted.

- 24.104. Page 5-9, [of the Hazardous Materials Technical Report], fifth bullet: Lead-based paint concerns were not identified in the section on hazardous building materials.

**Response.** The bulleted section referenced presents information from the SFIA Master Plan of November 1989. No information on lead-based paint concerns are presented in the SFIA Master Plan.

## 25. SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS

- 25.1. Page 3.8-8, 3.8-10 [of the DEIR/Technical Appendix]: Suggests that construction of the Hickey Station would enclose a portion of Colma Creek in a box culvert and that this will have a beneficial effect by improving discharge of storm waters and would reduce upstream flooding to some extent....We disagree. The proposed hydrological mitigation measures stated in the Draft EIR/EIS for Colma Creek drainage improvements are insufficient and would create a damming

effect that may aggravate flooding of the Treasure Island Mobile Home Park....The current proposal will improve only a portion of the channel leaving substandard channel capacity both upstream and downstream of the Hickey Station....The long term impacts of constructing the proposed alignment include eliminating any financial feasibility alternative as the alignment would use the only other unimproved area in the reach which can be used for flood control improvements through the Treasure Island Trailer Park in South San Francisco—the abandoned Southern Pacific Railroad right-of-way. This would then commit the City of South San Francisco (City) or the Flood Control Zone to either widen the existing channel through this reach—requiring the relocation of existing businesses and residences—or constructing a box culvert in Mission Road to off load peak flow in the existing channel.

**Response.** BART has performed additional analyses to determine consequences of “damming effect” cited in the comment and determined that flood waters originating from north of the intersection of Mission Road and the BART alignment would pond behind the dam and flood Treasure Island Trailer Park. This backwatering could be mitigated by:

- a. constructing a new open channel north of the Hickey Station parking lot combining the flow of existing Colma Creek with surface flood waters mentioned above;
- b. constructing a box culvert beneath the parking lot to accept the combined flow; and
- c. constructing an open channel connected to the box culvert which would deliver the flow to the existing channel at Mission Road and Oak Street.

This design is similar to Alternative II of the San Mateo County Flood Control District’s Reimer Report. Pages 3.8-17, 3.8-27, 3.8-29, and 3.8-33, of the DEIR/Technical Appendix, Impact 6 is revised as follows:

6. *Reconstruction of a stretch of Colma Creek in South San Francisco under the proposed project would improve the discharge of stormwaters resulting in a damming effect that may aggravate flooding of the Treasure Island Trailer Park during storm events. (BS)*

The proposed project alignment is either below grade or along the existing grade of the SPTCo rail line and will not adversely affect overland drainage patterns. The Hickey Station site will entail the enclosure of Colma Creek in a box culvert. This will increase the capacity of Colma Creek. The improved hydraulic characteristics of Colma Creek will reduce upstream flooding to some extent. Flood waters originating from north of the intersection of Mission Road and the BART alignment would pond as a result of the damming effect of the drainage improvements and would flood the Treasure Island Trailer Park.

**MITIGATION MEASURES.** The following mitigation measure would reduce the impact of flooding of Treasure Island Trailer Park to an insignificant level.

- 6.1 *Drainage Improvements. BART will construct drainage improvements consisting of the following: (1) a new open channel north of the Hickey Station parking lot, thereby combining the flow of existing Colma Creek with surface flood waters resulting from BART facilities; (2) a box culvert beneath the parking lot to accept the combined flow of Colma Creek and surface flood waters; and (3) an open channel connected to the box culvert which would deliver the combined flow to the existing channel on Mission Road and Oak Streets.*

- 25.2. The financial preclusion of flood control improvements by either the City or the Flood Control Zone due to BART’s construction in this reach of channel, will also delay upstream improvements

to mitigate the flooding that currently occurs along Mission Road near the BART Colma Station. This, in turn, will affect access to the currently being constructed Colma BART Station and create secondary impacts associated with the lack of this access during winter storm events.

**Response.** Please refer to Response 15.4 for a discussion of the flood control plan, which will address these concerns.

- 25.3. Pages 7-10 and 7-13 of the DEIR/SDEIS and page 7-14 of the DEIR/Technical [Appendix] suggest that construction impacts to the Treasure Island neighborhood will be limited to noise/vibration or visual. However, future disruption of the Treasure Island neighborhood is a certainty as a result of the BART project if local agencies attempt to effect upstream improvements after BART constructs the culvert under Hickey Station as proposed, without considering alternatives as suggested herein by the Flood Control District.

**Response.** The implementation plan described in Response 15.4 above will address these concerns. This plan includes the recommendations made by the San Mateo County Flood Control District to avoid flooding at the Treasure Island neighborhood.

- 25.4. Page S47 [of the Executive Summary]: The DEIR/DEIS suggests that the City of South San Francisco would have to make flood and drainage control improvements....The alternatives contained in the Reimer Report would have to be modified if BART is not constructed, but the alternatives are still feasible.

**Response.** The implementation plan described in Response 15.4 above will address the issues raised by BART construction from Mission Road to Oak Avenue. Flood and drainage control improvements upstream and downstream will remain the responsibility of the Flood Control District and the affected cities.

- 25.5. To prevent the damming effect and flooding of the Trailer Park and other adjacent properties, BART should construct improvements as suggested in Projects 8-11 on page 12 of the Draft Colma Creek Improvements Validation Study by Reimer Associates, dated January 24, 1995. This is a cost-effective solution as it would allow the construction of the BART tunnel at a much shallower depth. This is achieved by diverting the flood control channel to the old SPRR right-of-way and placing the BART extension to the west of the new channel.

**Response.** BART has reanalyzed the potential for flooding of the Treasure Island Trailer Park and will mitigate the effects of backwater flooding by implementing channel improvement as described in Response 15.4.

## 26. SAN MATEO COUNTY TRANSPORTATION AUTHORITY

- 26.1. BART is encouraged to reexamine Alternative VI in terms of improving the CalTrain connection to SFO, such as free BART transfers, supplemental shuttle bus service to airport employment sites, and other improvements that encourage CalTrain access to SFO.

**Response.** The Millbrae station configuration will be refined with City and County planners to improve CalTrain access. Please refer also to Response 11.1 for a discussion of transfers between CalTrain and BART and supplemental shuttle bus service to airport employment sites.

- 26.2. The Authority submits the attached letter written by Authority member Councilman Roger Chinn suggesting reconfiguration of the airport internal station based on his work with the Airport Roundtable. [Councilman Chinn's contains the following five recommendations:
- Locate the BART Airport International Terminal Station on a new "fifth" level, over the existing garage structure.

- Make the “fourth” level of the garage the level at which BART passengers would move horizontally on people movers.
- Design the aerial BART line to leave San Bruno by passing south of the 380-101 interchange and the viaduct, then curve into alignment with Concourse “F,” span the taxiway (supported on each side of the concourse) to arrive on the “fifth” level of the garage.
- Design the rail line to align with Concourse “B,” curving over the taxiway and crossing westerly over Highway 101. (An alternative to this would be to end the BART line over Concourse “B” and become the tail track for the station.)
- If the aerial BART were to continue across 101, it could continue in a curve until it aligns northerly with the SP right-of-way, and arrives (above or below ground as determined by local preference) at the CalTrain intermodal station for transfer of train passengers.]

**Response.** BART’s analysis of Councilman Chin’s proposed aerial alignment traversing over active taxiways, cargo aprons and airline concourses F and B with the Airport Station located on top of the existing central parking garage reveals the following consequences:

- Spans approaching 400 feet would be required for the two taxiway crossings in order to comply with existing FAA clearances for structures adjacent to or over taxiways and not preclude future high-capacity aircraft. In addition, the aerial guideway would have to provide a 70-foot vertical clearance from the surface to the underside of the structure.
- Extensive structural modifications would be required through existing airline terminal facilities and the central parking garage to accommodate new support columns and underground pile foundations. Costs and disruption of ongoing operations would be significantly higher than any other alignment proposed by BART.
- Based on SFIA’s current alignment and profile for their light rail system, the aerial station platform would have to be at an elevation of almost 90 feet since the ALRS profile is 68 feet in this same area. Special structural designs would be required to meet current seismic criteria for BART structures.

BART’s Alternative providing above-ground access to the terminal areas was developed as Design Option V-A. Further investigations regarding the feasibility of the tunneling alternative selected as the Alternative VI LPA resulted in consideration of an aerial alignment and station location for BART at SFIA. This option is discussed in the FRDEIR/S#2DEIS, and referred to as the Aerial Design Option LPA. Please refer to Response 2.7 for more information on the LPA selection.

26.3. Also enclosed is information on the CalBART-CalTrain SFO Relocation Proposal for consideration.

**Response.** Your support for the CalBART proposal is noted. Please refer to Response 13.4 for a discussion of the CalBART proposal.

26.4. The document shows no difference in ridership or travel time among alternatives with regard to CalTrain passengers accessing the airport. This finding should be reexamined in light of the double transfer required in Alternative VI.

**Response.** Please refer to Response 66.111.24 for a discussion of travel time and ridership for CalTrain patrons accessing the SFIA.

26.5. It is not clear in the document as to the cost estimate for use of the CalTrain right-of-way. The cost and impacts of the encroachment should be clearly identified.

**Response.** The cost of use of the CalTrain right-of-way is included in overall right-of-way costs reflected in Table 6-1 of the DEIR/Technical Appendix.

26.6. The document projects a decrease in CalTrain ridership for the build alternatives from the TSM alternative. This reduced ridership and corresponding fare revenue reduction means higher subsidies will be required. There is no indication of how these additional costs would be addressed.

**Response.** All BART build alternatives would increase CalTrain ridership above no build conditions. Ridership shown under the TSM has not been achieved by CalTrain, and is therefore not being reduced. The difference in ridership between TSM and BART build alternatives is a hypothetical reduction, not a cost to be covered.

26.7. The financial plan, guaranteeing the viability of both the SamTrans bus system and CalTrain, should be clearly in place prior to the selection of the LPA.

**Response.** Please refer to Responses 14.93 and 14.94 for a discussion of the financial plan and potential impacts on SamTrans and CalTrain.

26.8. The Transportation Authority recommends that the final document include the Downtown Extension as part of the CalTrain configuration in the analysis of all the alternatives. This would provide a comparison between the alternatives with and without the extension element.

**Response.** Please refer to Response 11.6 for a discussion of transportation-related impacts to the BART extension with the CalTrain downtown extension.

26.9. xal-4Locate the BART station on a new "fifth" level, over the existing garage structure. The next level below ("fourth"), of the garage, would be the level at which the BART passengers descend to, to then be able to move horizontally on people movers. As to the aerial BART line, it would, after leaving San Bruno and passing south of the 380-101 interchange maze, continue to travel southerly and ascend and cross easterly over US 101 and the Viaduct. It then would curve into alignment with Concourse "F", span over the taxiway, be supported on each side of the concourse, and arrive on the "fifth" level of the Garage....After leaving the BART station, the rail line would align with Concourse "B", curve over the taxiway, and cross westerly over US 101. An alternative to this would be to end the BART line over Concourse "B" and become the tail track for the station....The aerial BART line, if it were to continue across US 101, could continue curving until it aligns northerly with the SP right-of-way, and arrive, above or below ground as determined by local preference, to the CalTrain intermodal station for transfer of train passengers.

**Response.** An alternative similar to the one described by the commentor was proposed and rejected during the AA/DEIS/DEIR scoping and screening processes. The commentor's proposed alternative includes a BART aerial loop alignment crossing over Highway 101 and active Airport taxiways, with a north-south oriented BART aerial station located on a new fifth level of the existing Airport garage.

This proposal has the following major flaws:

- 1) An aerial transit structure that traverses active aircraft taxiways would violate FAA regulations. In addition, to maintain the required aircraft clearances, the guideway structures would have to be over 70 feet in the air, with trussed bridges spanning 400 feet, all designed to meet BART's rigorous seismic standards.
- 2) Location of the BART station atop the central garage would require the central garage to be reconstructed, as the existing garage is not designed to support BART trains and meet BART's seismic standards.
- 3) A number of residences would have to be acquired in the North Millbrae neighborhood to provide access from the airport south.

4) The costs associated with construction and installation of special long-span trussed bridges and real estate acquisition would likely be greater than the proposed Aerial Design Option LPA.

For the above reasons the commentor's proposed alternative is considered impracticable and infeasible.

## 27. SAN MATEO UNION HIGH SCHOOL DISTRICT

- 27.1. The district is requesting mitigation of any financial loss in a way that will allow the district to compensate for the revenue loss over a period of time...The district proposes that BART reimburse the district the full amount of any loss during the first fiscal year that the loss is sustained with a second year reimbursement of 75 percent of the loss, a third year reimbursement of 50 percent and a final fourth year reimbursement of 25 percent of the lost revenue. The dollar amount of this claim to be determined once a final route is established and the San Mateo County Assessor is able to come up with a value.

**Response.** Please refer to Response 16.34 for a discussion of revenue lost to school districts as a result of the proposed BART extension.

## 28. SOUTH SAN FRANCISCO UNIFIED SCHOOL DISTRICT

- 28.1. We continue to be concerned about the noise and vibration impact on Los Cerritos Elementary School and El Camino High School. It is understood that necessary mitigation measures will be taken to minimize the educational environmental implications.

**Response.** Operational noise impacts would occur at the Los Cerritos Elementary School under Alternative III, and sound walls built at the retained cut structure have been indicated as mitigation (see DEIR/Technical Appendix page 3.9-39). No operational BART noise or vibration impacts would occur at any other school in South San Francisco. Please refer also to Response 28.3 for a discussion of construction impacts.

- 28.2. It is assumed that the subway alternatives will not adversely restrict direct student access across the railroad right-of-way between El Camino Real and Mission Road for students attending El Camino High School. Presently, students cross in five different locations. It is unclear how this is impacted in the "base case" alternative with retained cut alignment.

**Response.** The BART alignment profile in the vicinity of El Camino Real High School would be in subway, except under Alternative III (the Base Case Alternative), where portions of this segment would be retained cut. The portions in retained cut would be fenced to prevent pedestrian access. Under the other BART build alternatives, the legal right-of-way would be controlled by SamTrans and such pedestrian crossings as exist today would remain informal and illegal, unless a linear park for pedestrians and bicyclists were to be created along the subway portion of the BART extension alignment.

Per terms of the BART-SamTrans Comprehensive Agreement, signed March 1990, SamTrans will have fee title interest in property purchased for this project, but will grant BART an operating easement for construction and operation of its facilities. If additional pedestrian access points are needed and justified as part of this project, SamTrans could purchase the needed right-of-way at BART's request and BART could construct the facilities.

- 28.3. The District is also concerned that adequate noise/vibration mitigation measures and toxic hazard safeguards would be instituted during the construction phase of the BART-SFO extension to ensure no disruption of the instructional programs nor exposure to students and staffs at El Camino High and Los Cerritos Elementary Schools.

**Response.** Where schools are close enough to BART construction, these schools would be considered "special zones." Construction noise that might interfere with instruction at Los Cerritos Elementary School, which would be close to the construction, and at El Camino High School and South San Francisco High School, which have classrooms that are farther away, would be minimized by enforcing noise limits that are consistent with the existing ambient noise at these schools. Temporary noise barriers and possibly shielded impact pile drivers would be required to achieve construction noise limits at Los Cerritos Elementary School and possibly at El Camino High School and South San Francisco High School. Measures such as pre-drilled piles or use of a static-load hydraulic pile driver may also be required to limit construction noise and vibration (see DEIR/Technical Appendix, pages 3.13-165 and 3.13-166).

"Special zones" along the project alignment near schools will be given additional consideration for subsurface sampling locations to determine the presence of hazardous materials prior to construction. A Hazardous Materials Contingency Plan will be developed containing emergency procedures to be followed in the event that previously undetected contamination is discovered. These procedures will include contact phone numbers for construction managers to warn nearby schools if hazardous conditions are encountered, and modifications to existing school evacuation plans if required, based on the project construction location versus existing safe evacuation areas.

- 28.4. We would like to have input into the design of the Hickey (or Chestnut) Station to safeguard parking, as well as pedestrian traffic and safety.

**Response.** The final design of the Hickey (or Chestnut) Station will involve consultation with local officials.

## 29. TOWN OF COLMA

- 29.1. Colma supports Alternative VI which is the same as the Locally Preferred Alternative through Colma subject to modifications requested by our comments.

**Response.** Please refer to Response 2.7 for a discussion of the selection of the Alternative VI Aerial Design Option as the LPA, and to the FRDEIR/S#2DEIS for a description of the new LPA. As part of the LPA engineering process, BART is working closely with local jurisdictions to develop a satisfactory design.

- 29.2. Certain road improvements are listed as part of the proposed project. For clarification we request that the listing regarding the Hickey Boulevard extension be revised to read "An extension of Hickey Boulevard to connect El Camino Real with Mission Road on the north side of the Hickey Station including signalization at El Camino Real and at Mission Road." We also request that this clarification be made for Alternative V at page 2-52, Alternative V-A at page 2-61, Alternative V-B at page 2-63 and Alternative VI at page 2-75.

**Response.** These two proposed intersections would include traffic signals as shown in Tables C-16 through C-24, Intersection Level of Service for each alternative, in Appendix C of the DEIR/Technical Appendix. Under the column on intersection control, the intersections of El Camino Real and Hickey Extension and Mission and Hickey Extension are listed as having traffic signals. Chapter 2 in the DEIR/Technical Appendix lists general roadway improvements only and is not intended to provide a detailed description of specific design elements (such as signalization) for those improvements.

- 29.3. We request that the easterly portion of the Hickey Boulevard extension, including signalization at Hillside Boulevard, be made a part of the project.

**Response.** The extension of Hickey Boulevard between Mission Road and Hillside Boulevard is a proposed improvement by San Mateo County and is not part of the BART-SFIA Extension

project. Please refer to Response 19.7 for further discussion on the Hickey Boulevard Extension between Mission Road and Hillside Boulevard.

- 29.4. We request that improvements to Mission Road and signalization of the Mission Road/El Camino Real intersection be made a part of the BART extension project. This comment also applies to the description of roadways for Alternative IV at page 2-45, Alternative V at page 2-52, Alternative V-A at page 2-61, Alternative V-B at page 2-63 and Alternative VI at page 2-75.

**Response.** Traffic at the intersection of Mission Road/El Camino Real will be reduced as a result of the BART extension because vehicles that were previously destined for Daly City or Colma Stations will not travel to one of the BART extension stations. The reduction in traffic under the BART build alternatives is the major reason the level of service at the intersection of El Camino Real/Mission was not calculated. Therefore, the need to install a traffic signal at this intersection is reduced by the project. Improvements to intersections on Mission Road in the vicinity of the South San Francisco BART station are proposed.

- 29.5. A vertical profile option resulting in a retained cut alignment through Colma from the Colma tail tracks to the South San Francisco city limit is unacceptable to the Town of Colma. This configuration should not be considered as a viable option in the context of the Locally Preferred Alternative nor Alternatives IV through VI.

**Response.** The commentator's opposition to a retained cut alignment through Colma is noted. As described in Response 2.7, the BART and SamTrans boards have selected the Alternative VI Aerial Design Option as the LPA. The vertical alignment of BART would be in subway through Colma under this design option.

- 29.6. By identifying the retained cut vertical profile as an option for Alternatives IV, V and VI it makes the Technical Appendix inconsistent with the executive summary which discusses and maps the retained cut through Colma only in the context of Alternative III. This is misleading to the decision makers and general public who may...miss the single sentence in each of the EIR documents which identifies the Technical Appendix as the baseline document in case of inconsistencies among the DEIR documents.

**Response.** The retained cut Vertical Profile Option in Colma and South San Francisco is identified for the 1992 LPA, Alternatives IV, V and VI and their design options in both the DEIR/Technical Appendix and the DEIR/SDEIS. The Executive Summary is derived from the DEIR/Technical Appendix and is not intended to be a comprehensive document, but instead is intended to summarize significant impacts of the proposed project and the alternatives. The impacts of an open retained cut alignment through Colma are fully analyzed in the documents.

- 29.7. Page 2-38 [of the DEIR/Technical Appendix.] Roadways - Base Case. Construction of the Chestnut Station will result in traffic impacts on Mission Road and at the Mission Road/El Camino Real intersection.

**Response.** Construction impacts under Alternative III (the Base Case) to Mission Road are discussed on page 3.13-34 of the DEIR/Technical Appendix as requiring partial closure of Mission Road for one month. The associated impacts of this closure are listed as insignificant because implementation of the traffic management plan as part of the construction plan would minimize the impacts of such a partial closure.

- 29.8. The text, at page 2-45 [of the DEIR/Technical Appendix], identifies road improvements for this alternative to be the same as the TSM Alternative and the TSM Alternative does not include the Hickey Boulevard extension as part of the BART project responsibility. This statement seems to also contradict Figure 2.2-4 showing the Hickey Boulevard extension as part of Alternatives IV, V, V-A, V-B and VI.

**Response.** The text on page 2-45 of the DEIR/Technical Appendix explains that the roadway improvements assumed for Alternative VI are similar to those for the TSM Alternative, with a few exceptions. The apparent inconsistency identified by the commentor arises because the Hickey Boulevard extension involves two parts of the major roadway. Both the TSM Alternative and Alternative VI assume the segment from Mission Road to Hillside Boulevard and then to U.S. 101 would be constructed by San Mateo County (see page 2-30 in Chapter 2, Project Description, of the DEIR/Technical Appendix). The segment of the Hickey Boulevard extension between El Camino Real and Mission Road would be built by BART if the BART extension were approved and the Hickey Station selected.

- 29.9. Page 3.1-29...paragraph [3] [of the DEIR/Technical Appendix] incorrectly states that the new Colma Station is in the Town of Colma. The station is in unincorporated San Mateo County just north of the Town. This correction should also be made at page 3.1-31, paragraph one.

**Response.** The new Colma Station lies within unincorporated San Mateo County, just north of the Town. Clarifying revisions have been made at three places in the text:

Page 3.1-5, paragraph three, sentence eight of the DEIR/Technical Appendix is revised as follows:

An extension of BART 1.5 miles southward from the Daly City Station to a new station ~~in immediately north of~~ the Town of Colma is currently being built and is scheduled for revenue service by mid-1995.

Page 3.1-29, paragraph three under Impact 8, sentence three:

Under the proposed project, passengers from the Peninsula would be able to board at BART stations in northern and central San Mateo County instead of traveling to ~~the~~ Colma or Daly City stations.

Page 3.1-31, paragraph one under Impact 1, sentence two is revised as follows:

For 1998 and 2010, BART will extend about 1-1/2 miles south to a new station ~~in immediately north of~~ Colma, providing an increase in geographical coverage.

- 29.10. Page 3.1-29...[Impact] 9 concludes that boardings at the Colma Station would decrease with completion of the BART extension and suggests that expanded parking facilities would not be necessary. The plan to expand parking should be retained and funded as part of the extension project with no decision made that might modify the expansion plan until the BART Airport extension has been completed and is in operation for at least one year.

**Response.** According to the MTC travel demand model, the demand for parking at the Colma BART Station would significantly decrease with operation of the BART extension because drivers would be diverted to stations south of Colma. The forecasted demand of 3,670 vehicles under the No Build Alternative and 3,040 under the TSM Alternative in 2010 decreases by more than 1,000 vehicles depending upon the specific BART build alternative. The forecasted demand for parking at the Colma Station in 2010 ranges from 1,770 under the 1992 LPA to 2,360 under Alternative VI and the Alternative VI Aerial Design Option. The BART extension would, in essence, mitigate potential parking spillover under the No Build Alternative. The expansion of the parking supply at the Colma Station cannot be justified based on the best available information.

- 29.11. Page 3.1-88 [of the DEIR/Technical Appendix]...Improvement to Mission Road and signalization at the Mission Road/El Camino Real intersection must be included in the traffic mitigation analysis and included on Table 3.1-70 at page 3.1-91. This comment also applies to the analysis at page 3.1-105.

**Response.** Please refer to Response 29.4 for a discussion of improvements to Mission Road and the intersection of El Camino Real/Mission.

- 29.12. Page 3.1-167 [of the DEIR/Technical Appendix]...The residential area of the Town of Colma is located near the BART station just east of Mission Road and extending from B to F Streets. Spillover parking demand could occur on days with the highest demand at the Colma Station thereby causing disruption to Colma residents. We request that this impact be listed and that the following mitigation be added as Measure 2.2. "Retain and fund expanded parking for 816 additional spaces for the Colma BART Station with no decision to modify the expanded Parking Plan until the BART Airport extension has been completed and in operation for at least one year." We also request that this addition be made for Alternative III at page 3.1-172, Alternative IV at page 3.1-175, Alternative V at page 3.1-177 and Alternative VI at page 3.1-184.

**Response.** Preventing spillover parking into residential streets is consistent with the analyses in the DEIR/Technical Appendix, although it is noted that Mitigation Measure 2.1 would reduce the impact to an insignificant level and expanded parking is not required at the Colma Station after completion of the BART-San Francisco Airport Extension. Spillover parking into residential areas around existing BART stations has been controlled by residential parking permits which have limited parking duration. Please also refer to Response 29.10 and to Responses 14.25 and 14.38 for a discussion of monitoring and mitigation of spillover parking into local streets.

- 29.13. Page 3.1-185, 186 [of the DEIR/Technical Appendix]...The description of existing conditions should be revised to acknowledge that there is no existing trackage in the CalTrain right-of-way through Colma and that portions of the right-of-way are owned by cemetery and private interests. Pedestrian crossing of the right-of-way is not currently dangerous at any location in Colma except at the tailtrack section north of the extension project and may not be illegal where the property is privately owned.

**Response.** The commentor is correct that the CalTrain tracks do not go through Colma and that there is no existing SPTCo trackage in Colma. The rail corridor through Colma and South San Francisco which merges with the CalTrain right-of-way is part of SPTCo's San Bruno Branch line. That portion of the San Bruno Branch that goes through Colma and the cemeteries has been officially abandoned by SPTCo. Portions of the right-of-way through the cemeteries are in the possession of cemeteries, private landowners, and SPTCo.

- 29.14. The description of existing conditions does not acknowledge that the Town of Colma General Plan proposes a bicycle path along the CalTrain right-of-way through Town. It is requested that the BART plans be revised to incorporate this feature into each of the cut-and-cover alternatives.

**Response.** The Summary DEIR/SDEIS states on page 3.1-30 that future bicycle facilities are planned by Colma to run along the San Bruno Branch right-of-way. The commentor is correct that on page 3.1-186 of the DEIR/Technical Appendix plans by the Town of Colma were not specifically identified in the statement "Each of the city's plans calls for a bikeway along the railroad right-of-way." Please refer to Response 146.1 for information on efforts for bike path development and also refer to Volume I of the FEIR/FEIS for general description of a proposed bike route utilizing the BART alignment right-of-way.

- 29.15. Page 3.3-6 [of the DEIR/Technical Appendix]...The statement that there are no residential areas near the project corridor is not accurate. An 18-unit Senior Housing Complex, at 1180 El Camino Real, is located approximately 300 feet west of the CalTrain right-of-way. One residence at Olivet Parkway, one at Salem Cemetery and six homes at 1431-54 Mission Road, back up directly onto the CalTrain right-of-way. Four homes exist behind Molloys at 1655 Mission Road.

**Response.** The statement that there are no residential areas in Colma near the project corridor is inaccurate. Page 3.3-6, paragraph four, is therefore revised as follows:

The cemeteries along El Camino Real are the only sensitive receptors in Colma within the project corridor. There are also scattered no residential areas or parks in Colma along Mission Road and El Camino Real near the project corridor.

- 29.16. Page 3.3-6 [of the DEIR/Technical Appendix]...Contrary to the DEIR/Technical Appendix text, the street setbacks along the west side of El Camino Real are not narrow. Colma requires a 30-foot landscape setback from the street right-of-way to any structure. Over 90 percent of the 4,200 feet of frontage along the west side of El Camino Real, between Colma Boulevard and the Town's southern limit, complies with this requirement.

**Response.** The DEIR/Technical Appendix is revised on page 3.3-6, paragraph six, sentence two, to clarify this comparison as follows:

Along the west side within the same stretch, building facades are also non-continuous, and generally but setbacks are narrow at least 30 feet from the street.

- 29.17. Page 3.3-7 [of the DEIR/Technical Appendix]...The BART EIR should note that a "T" zone was adopted as part of the Colma Municipal Code to designate the transit route along the CalTrain right-of-way through Colma. Provisions of the T zone state that "No person may erect, construct, enlarge or improve any public or private transit building or transit structure in the T zone, or permit the same to be done, unless such building or structure is underground and covered with soil so as to make its location indistinguishable from adjacent terrain".

**Response.** The Colma Municipal Code Section 5.335.2, Restrictions Applicable to the "T" Zone, is cited in the Land Use section of the DEIR/Technical Appendix on page 3.2-8. The DEIR/Technical Appendix is revised to include this reference in the Visual Quality section as well. On page 3.3-7, a fifth bullet under "General Plan Policies" is added as follows:

- A "T" zone was adopted as part of the Colma Municipal Code, Section 5.335.2 to designate a transit route along the CalTrain right-of-way through Colma. Provisions of the T zone state that "No person may erect, construct, enlarge or improve any public or private transit building or transit structure in the T zone, or permit the same to be done, unless such building or structure is underground and covered with soil so as to make its location indistinguishable from adjacent terrain."

- 29.18. Page 3.3-29 [of the DEIR/Technical Appendix]...It is unclear whether the replacement of ground cover and shrubs is being done as part of the project. Therefore we request that Mitigation Measure 2.1 be reworded to read as follows:

"Replacement of Vegetation. BART will prepare a Landscape Plan and install ground cover, shrubs and replacement trees in those areas disturbed by construction of the extension through Colma with species chosen in cooperation with the Town of Colma. Planting densities and plant sizes will be selected to complement adjacent, undisturbed cemetery vegetation and to provide a similar level of vegetative screening as existed prior to BART construction. Pine and Monterey Cypress will be predominant. Mature trees lost to construction will be replaced with specimen trees of minimum 36" box size on a minimum 1:1 ratio."

**Response.** Replacement of vegetation is part of the project but is identified as a mitigation measure to present specific details to the reader and the affected jurisdiction. An arborist's report to be prepared prior to vegetation clearing for construction will identify the predominant tree species and identify specimen or heritage trees to be protected in accordance with the Town of Colma Municipal Code Chapter 5.6. In light of this and the commentor's suggestion, Mitigation Measure 2.1 on page 3.3-29 of the DEIR/Technical Appendix is replaced by the following:

**2.1 Vegetation Replacement.** BART will prepare a Landscape Plan and install ground cover, shrubs, and replacement trees in those areas disturbed during construction with species chosen in cooperation with the local jurisdiction and the cemeteries and based on recommendations in the arborist's report. Planting densities, plant sizes, and species will be selected to complement adjacent, undisturbed cemetery vegetation and to provide a similar level of vegetative screening as existed prior to BART construction.

Tree selection may be critical. Tall trees may impose loads onto subway exceeding design criteria load limit and may allow small roots to penetrate into small cracks in subway concrete causing premature degradation of structure and causing unwanted leaks. The design criteria allows 600 pounds per square foot which may be shared by vegetation loads and equipment maintenance loads. Nevertheless, the total impact of plantings on BART's facilities must be weighed with plant selection criteria stated above.

- 29.19. Further it is requested that a new Mitigation Measure 2.2 be added [to the DEIR/Technical Appendix on page 3.3-29] to read as follows:

"Prior to beginning work BART will post signs and install black colored temporary construction fencing delineating the construction zone through Colma including the CalTrain, temporary construction access ways, worker parking and contractor lay down areas to clearly identify all trees and other vegetation to be protected and preserved. Vegetation to be removed will be marked with red tape to designate removal and yellow tape to designate pruning only. Vegetation to be protected and preserved will be fenced with black colored fencing at the drip line to prevent ground compaction."

**Response.** The mitigation measure recommended by the commentor addresses construction contractor specifications. Mitigation Measures 1.1, coordination with cemeteries, and Mitigation Measure 3.1, coordination with cities and communities, recommended under the proposed project on pages 3.13-53 and 3.13-54 of the DEIR/Technical Appendix will ensure construction zones and access ways are clearly marked. The arborist's report to be prepared prior to construction will identify vegetation to be preserved and contractor specifications will contain details regarding vegetation preservation.

- 29.20. The second paragraph under Impact 1 on this page [3.3-29 of the DEIR/Technical Appendix] is misleading to the reader. By stating that the subway configuration would cause no significant change to Colma's visual environment, the reader is led to perceive that the subway will be built by tunneling and that no ground surface disruption will occur. The actual fact is that most, if not all, vegetation would be removed from the construction zone including mature trees acknowledged in Impact 2. The Town of Colma Municipal Code Chapter 5.6 protects mature trees by requiring a permit for pruning or removal of any tree having a trunk diameter of 12" or greater measured 48" above natural grade. We believe that removal of most, if not all, vegetation during construction will result in a significant visual impact requiring mitigation. We request that the rewording of Mitigation 2.1 and the addition of Mitigation Measure 2.2 also be made applicable to Alternative IV at page 3.3-62, Alternative V at page 3.3-74, Alternative V-A at page 3.3-83, Alternative V-B at page 3.3-84 and Alternative VI at page 3.3-85.

**Response.** The FEIR/FEIS addresses both construction and operations impacts. Impacts 1 and 2 on page 3.3-29 of the DEIR/Technical Appendix address long-term or operations impacts and the short-term loss of trees along the alignment is addressed in Section 3.13, Construction. Please refer to Responses 29.18 and 29.19 for a discussion of vegetation replacement and preservation.

- 29.21. Page 3.3-48 [of the DEIR/Technical Appendix]...[For the Base Case] vegetation in the construction zone will be removed for construction and because the retained cut is a hole, the vegetation can never be replaced....This must be considered a significant, unavoidable impact.

- Response.** Vegetation loss under the Base Case Alternative is described in the DEIR/Technical Appendix on page 3.13-73, Construction/Visual Quality. Even after implementation of mitigation measures, the impact to scenic resources and the obstruction of views would remain significant and unavoidable.
- 29.22. Construction of BART in a retained cut configuration will introduce a linear element into the existing park-like setting established in the various cemeteries east of El Camino Real....Even if mitigated by landscaping, [this] will forever change the graceful appearance of gently sweeping lawns and must, therefore, be considered a significant, unavoidable impact.
- Response.** Only under Alternative III will the proposed project run in a retained cut configuration through the cemeteries. This impact is described on pages 3.3-47 through 3.3-49 of the DEIR/Technical Appendix as Impacts 1, 2 and 3. With appropriate landscaping to mask the retaining walls and fences, the visual effects of this configuration would be reduced to an insignificant level. For all other proposed alternatives, including the Aerial Design Option LPA, the proposed project would run in a subway configuration through the cemeteries. Thus, these visual impacts would be avoided.
- 29.23. Page 3.3-48 [of the DEIR/Technical Appendix]..Mission Road will be raised slightly over a distance of about 450 feet to accommodate [the Base Case] Alternative. Existing drainage must not be interrupted. Proper coordination of work with the Town of Colma is critical.
- Response.** Section 3.13.11, Construction/Hydrology, addresses drainage and stormwater runoff during construction. Implementation of the mitigation measures recommended under the proposed project, i.e., compliance with a NPDES construction permit, dry season construction, and maintenance of unobstructed drainageways would ensure that drainage is not interrupted. The proposed change in grade for Mission Road is minimal, as shown on Page 103 of the Design Appendix - Conceptual Design Drawings. Construction under Mission Boulevard would involve coordination with the Town of Colma to ensure public health and safety.
- 29.24. Page 3.4-23 [of the DEIR/Technical Appendix]..Alternative III is a retained cut configuration. The statement that the right-of-way would be landscaped the same as for the proposed project is not feasible because the retained cut is a hole that cannot be landscaped. The reference to Mitigation Measure 3.1 should be changed to read "sound wall vegetation" rather than right-of-way landscaping.
- Response.** The retained cut alignment could not be landscaped in the same manner as the subway alignment because the former would be an open cut. The reference to Mitigation Measure 3.1, i.e., right-of-way landscaping, still applies to the Base Case Alternative right-of-way; however, landscaping would be placed outside the retaining wall within the right-of-way. Both sound walls and right-of-way landscaping would be implemented as described on page 3.4-23 of the DEIR/Technical Appendix.
- 29.25. Page 3.5-7 [of the DEIR/Technical Appendix]..The description of waste water service for the Town of Colma is incomplete. Colma has purchased 490,000 gpd reserve capacity in the North County System and currently (1994) discharges about 53,560 gpd (11 percent of reserve) to the system. Colma has purchased 450,000 gpd reserve capacity in the South San Francisco/San Bruno Joint System and currently (1994) discharges about 96,500 gpd (21 percent of reserve) to the system.
- Response.** The updated wastewater service capacity information from Colma is used to amend page 3.5-7, paragraph two of the DEIR/Technical Appendix, as follows:
- Wastewater treatment for the Town of Colma is provided by both two sources: the North County Sanitation District (District), administered by the City of Daly City, and the

South San Francisco/San Bruno Joint Sewer Facilities (Joint Facilities), administered by the City of South San Francisco. Colma currently generates approximately 47,000 gallons per day (gpd), 10 percent of its allotment (May 1993). The Town of Colma has purchased 490,000 gallons per day (gpd) reserve capacity in the District and 450,000 gpd reserve capacity in the Joint Facilities. The Town of Colma currently (1994) discharges approximately 53,560 gpd (11 percent of reserve) to the District and approximately 96,500 gpd (21 percent of reserve) to the Joint Facilities.

- 29.26. Page 3.5-15 [of the DEIR/Technical Appendix]...The projected increase in waste water treatment demand by Colma in 1998 and 2010 should be reconciled with the current flow rates of 53,560 gpd to North County (1994) and 96,500 gpd to the South San Francisco/San Bruno Joint Facility (1994) respectively.

**Response.** With the new information provided by the Town of Colma, page 3.5-15, paragraph three, sentence one of the DEIR/Technical Appendix, is amended as follows:

Water and wastewater treatment demand in Colma in 1998 would be approximately 0.18 mgd 0.19 mgd and in 2010 approximately 0.23 mgd 0.21 mgd.

- 29.27. The bottom paragraph on...page [3.5-15 of the DEIR/Technical Appendix] acknowledges that waste water flows from South San Francisco and San Bruno are combined for treatment at the Joint Sewer Facilities plant. However, the flow from the Town of Colma (96,500 gpd now and projected volumes for the future) must be added to the total. Otherwise the DEIR evaluation will be inaccurate and incomplete.

**Response.** Based on the new information provided by the Town of Colma, page 3.5-15, paragraph seven, sentence two of the DEIR/Technical Appendix, is amended as follows:

This flow would be combined with the projected 4.98 mgd in 2010 from San Bruno and .21 mgd from Colma, since both all cities are served by the south San Francisco Joint Sewer Facilities treatment plant.

In addition, similar text on page 3.5-16, paragraph three, sentence two of the DEIR/Technical Appendix, is revised as follows:

These future flows would be combined with South San Francisco's and Colma's, since both San Bruno and South San Francisco all three cities are served by the South San Francisco/San Bruno Joint Sewer Facilities treatment plant

- 29.28. The statement at the top of page [3.5-17 of the DEIR/Technical Appendix] "Implementation of all mitigation measures for cumulative impacts would be the responsibility of the affected jurisdictions" is unacceptable if Colma's purchased treatment reserve is diminished or eliminated by the BART project. This comment also applies to the analysis of the Base Case at page 3.5-20, Alternative IV at page 3.5-23, Alternative V at page 3.5-25, Alternative V-A at page 3.5.27, Alternative V-B at page 3.5-27 and Alternative VI at page 3.5-30.

**Response.** The statement identified by the commentor applies to cumulative impacts. No significant project-specific impacts are projected due to wastewater generated by the project or the alternatives. The cumulative impacts identified are due primarily to future population growth which may be approved by the local jurisdictions. Please also refer to Response 16.107 regarding impacts to community services.

29.29. The statement "Since no station is proposed for Colma, Burlingame or the SFIA, no water or waste water impacts are anticipated in these communities/facility" is not accurate. Colma has purchased waste water treatment capacity in the SSF/San Bruno Joint Facility Waste Water Treatment plant, therefore increased flows due to BART facilities in either South San Francisco or San Bruno can affect Colma's purchased treatment reserve.

**Response.** If the Town of Colma has purchased reserve capacity from the North County system and from the South San Francisco/San Bruno Joint Facility, that capacity is an allocation reserved solely for use by Colma. Thus, increased flows due to BART facilities in either South San Francisco or San Bruno affect their allotments but should not diminish the capacity available to Colma.

29.30. We request that the safety factor for sliding be identified for earth retaining structures. This comment also applies to the Base Case Analysis at page 3.6-27, the Alternative IV Analysis at page 3.6-28, the Alternative V Analysis at page 3.6-30, the Alternative V-A Analysis at page 3.6-32, the Alternative V-B Analysis at page 3.6-38 and the Alternative VI Analysis at page 3.6-34 [of the DEIR/Technical Appendix].

**Response.** Section 7.3.2 of the BART Design Criteria for earth retaining structures requires that safety against sliding, under permanent loads, be provided by using a minimum factor of safety of 1.50. This factor of safety is not identified in the DEIR/SDEIS because it applies to permanent loads for which the structures need to be designed, and these loads are not considered a geologic hazard. Page 3.6-24, paragraph four, sentence four of the DEIR/Technical Appendix identifies a BART Design Criteria factor of safety of 1.1, which is used to check the overall stability of a retaining structure against overturning under seismic loads and to check the overall stability of the medium containing the structure. This safety factor is applied to pseudo-static loading (i.e. a combination of static and seismic loading).

In sum, BART Design Criteria requires a minimum factor of safety against sliding under static loading (without earthquake) of 1.50 for earth retaining structures. For combined static plus seismic loading (with Maximum Credible Earthquake), a minimum factor of safety of 1.1 is required.

29.31. Page 3.8-2 [of the DEIR/Technical Appendix]...The first paragraph under this topic [Flood Areas Within the Project Corridor] is inaccurate and incomplete...Note also that the BART Colma Station drain merges into the F Street culvert box. Excess flow floods El Camino Real and backs up into the Meadowbrook Trailer Park.

**Response.** Page 3.8-2 of the DEIR/Technical Appendix has been corrected. The first paragraph under Flood Areas within the Project Corridor has been revised to read as follows:

~~Near the Colma BART Station currently under construction, the Daly City storm drain enters a junction structure. Near the intersection of F Street and El Camino Real, the Colma BART Station storm drain merges into the F Street culvert box. Because the downstream storm drain has one-half of the waterway area of the upstream storm drain, the excess flow is forced through a side channel floods El Camino Real and backs up into the Meadowbrook Trailer Park on the northwest side of the intersection, where it ponds. During a 50 year storm....~~

29.32. The second paragraph under this topic [Flood Areas Within the Project Corridor of the DEIR/Technical Appendix] is also inaccurate. It is true that FEMA does not map properties subject to flooding in the Colma area. However, the lack of mapping does not mean that the creek is sized to adequately contain the 100 year storm event.

**Response.** Please refer to Response 19.91. The third and fourth sentences of the fourth paragraph on page 3.8-2 have been stricken and the paragraph updated.

29.33.

Flooding regularly occurs along Colma Creek due to the lack of sufficient capacity in the channel to accommodate large storm events....These existing flooding problems will hinder public access to both the Colma BART Station that is nearing completion now and the Hickey Station that is proposed as part of the BART extension project. This comment also applies to the Project Specific Analysis - LPA, Mitigation Measure 1 at page 3.8-11, the Base Case Analysis at page 3.8-22, the Alternative IV Analysis at page 3.8-25, the Alternative V Analysis at page 3.8-28, the Alternative V-A Analysis at page 3.8-30, the Alternative V-B Analysis at page 3.8-31 and the Alternative VI Analysis at page 3.8-31 [of the DEIR/Technical Appendix].

**Response.** BART has reviewed and accepted Alternative II of the Reimer Study, sponsored partially by the Town of Colma. This alternative would address flooding impacts along Colma Creek. Please refer to Response 15.4 for further discussion of specific design solutions to Colma Creek drainage. In addition, Section 3.8 of Volume I of this FEIR/FEIS discusses flooding impacts, using additional information from the town and the County Flood Control District.

29.34.

Page 3.8-14 [of the DEIR/Technical Appendix]. It is suggested that BART facilities be designed to incorporate the Colma criteria whereby the difference in runoff between the 10 year predevelopment storm (original natural state) and the 100 year post-development storm is detained and released at the 10 year predevelopment rate.

**Response.** The Colma Creek drainage facility will be designed in accordance with accepted design practice which includes a time of concentration to insure that the design flow is not exceeded during the flood period. Further details regarding specific design solutions to Colma Creek drainage are presented in Response 15.4.

29.35.

Page 3.8-17...[LPA] [Impact] 6, construction of a stretch of Colma Creek would improve only a portion of the Colma Creek channel leaving substandard channel capacity both upstream and downstream of the Hickey Station....The proposed alignment of BART along the CalTrain right-of-way means that a damming effect would result at the south edge of the improvement and water will back up and flood the Treasure Island Trailer Park and other upstream areas. Colma Creek must be widened through the Treasure Island Trailer Park in South San Francisco or, alternatively, a separate box culvert must be installed in Mission Road to carry excess flows that the existing channel cannot contain. Widening of the existing channel will displace residents of the Trailer Park. Construction of the separate box culvert will cause the relocation of businesses and be very expensive....A more suitable mitigation measure is described in the Reimer Associates Validation Study prepared for the Colma Creek Flood Control Zone....The plan for the Flood Control Zone shows that BART could build a shallow subway segment in the former CalTrain right-of-way from the BART extension crossing at Mission Road to the south end of the Treasure Island Trailer Park in South San Francisco to construct and maintain an open configuration overflow channel above the subway in the same right-of-way. From the south end of the trailer park the BART subway extension would follow the existing Colma Creek channel and a new, widened Colma Creek channel would be constructed by BART along the former CalTrain right-of-way down to the existing, improved Colma Creek channel at Oak Avenue in South San Francisco. This alignment of the BART extension means that BART does not have to cross Colma Creek down by Oak Avenue. Long term maintenance of the channel would be assumed by the Flood Control District or City of South San Francisco....The Town of Colma, as a member of the Colma Creek Flood Control Zone, recommends that Mitigation Measure 6 be revised to accept the Flood Control Zone Plan and the mitigation components listed below:

- That BART dedicate surface rights to the Flood Control District to allow it to construct channel improvements within its right-of-way over the BART tunnel from the Mission Road crossing to the south end of the Treasure Island Trailer Park.
- That BART excavate the area of the channel cross section and dispose of the material removed, leaving the shoring piles and backfill in place so as to frame a channel.

- That BART permit the Flood Control District to construct and maintain specified flood control facilities over the BART tunnel.
- That BART set the vertical alignment [o]f its track tunnel so that it will allow the creek channel to be constructed over the top.
- That BART perform required environmental analyses to evaluate the BART extension alignment from the south end of the Treasure Island Trailer Park to Oak Avenue in South San Francisco.
- That BART dedicate the necessary portion of the CalTrain right-of-way to the Flood Control District for maintenance purposes and BART, at its expense, construct the 100 year capacity channel improvements utilizing gabion construction methods from the confluence of the Hickey outfall at the Treasure Island Trailer Park to Oak Avenue.
- That BART cooperate with the City of South San Francisco to construct an urban creek park along those realigned sections of Colma Creek that they may mutually agree should be constructed to an aesthetic standard higher than a trapezoidal channel.
- That BART construct appropriate channel sections upstream of Oak Avenue so as to transition safely from a 100 year capacity to a 50 year capacity for the existing channel downstream of Oak Avenue.
- That in the event BART does not construct the 100 year capacity channel improvements along the CalTrain right-of-way from the south end of the Treasure Island Trailer Park to Oak Avenue then a four section concrete culvert with a 100 year capacity must be built beneath the Hickey Station with required channel transition sections to intercept Colma Creek water and release it at Oak Avenue south of the proposed station.
- That BART permit the Flood Control District to contribute to BART an amount equal to the difference in cost between gabion and concrete channel construction should the Flood Control District find that funds are available and determine that future channel maintenance costs would be reduced. This comment also applies to the Base Case Analysis at page 3.8-24, the Alternative IV Analysis at page 3.8-27, the Alternative V Analysis at page 3.8-29, the Alternative V-A Analysis at page 3.8-30, the Alternative V-B Analysis at page 3.8-31 and the Alternative V Analysis at page 3.8-33.

**Response.** In response to hydrologic impacts along Colma Creek and subsequent technical discussions with all affected parties, BART proposes to implement Alternative II of the Reimer Associates Colma Creek Improvement Validation Study dated February 16, 1995, as described in Response 15.4. Implementation of these improvements would not result in new significant impacts, rather potential flooding impacts would be avoided.

29.37. Design Appendix Figures 3 and 4...The Town of Colma city boundary is incorrectly shown. The common boundary with South San Francisco follows the west edge of the CalTrain right-of-way past the Treasure Island Trailer Park, not the west edge of the SF Muni right-of-way as shown. This comment also applies to Figures 3 and 4, page 27 and 28 - Base Case Alternative and Figure 8, page 103 - Street Construction Profiles.

**Response.** Design Appendix Figures 3 and 4 on pages 6 and 7, Figures 3 and 4 under the Base Case Alternative, and Figure 8 on page 103 under Street Construction Profiles are revised to reflect the correct town boundary. Please refer to the Design Appendix in Volume IV of this FEIR/FEIS.

29.38. Page 3.9-36 [of the DEIR/Technical Appendix]...Construction of a sound wall is proposed at the edge of the retained cut. From the description it is not clear whether the sound wall would be constructed on only one side or on both sides of the retained cut opening. If the sound wall is on one side only then an analysis of noise deflection to the open side should be provided.

**Response.** Soundwalls on both sides of retained cut have been indicated for Alternative III where there are sensitive receptors adjacent to the alignment.

29.39. From the description [page 3.9-36 of the DEIR/Technical Appendix] it is also not clear if the sound wall would have landscape screening either separately or as part of the landscaping proposed for the retained cut as described in Section 3.4 of the [DEIR]/Technical Appendix....This construction, even if mitigated by landscaping, will forever change the graceful appearance of gently sweeping lawns and must therefore be considered a significant, unavoidable impact.

**Response.** Mitigation Measure 3.1 on page 3.4-23 of the Cultural Resources section, i.e., sound walls, is intended to mitigate the physical setting within the cemeteries. Specifically, preservation of the auditory setting is important to maintain these properties eligibility for nomination to the National Register of Historic Places. As noted in the discussion of Mitigation Measure 3.1, the sound walls would be landscaped. This measure is intended to be identical to the more detailed description presented on page 3.9-36 of the Noise and Vibration section of the DEIR/Technical Appendix, and that any sound walls installed as mitigation be landscaped. The visual effects of the retained cut are discussed in detail in Response 29.22.

29.40. We request that an additional Mitigation Measure 3.4 be added at page 3.9-20 [of the DEIR/Technical Appendix] to read as follows:

- “The existing structural condition shall be documented by photographs and in writing and the ambient ground borne vibration levels shall be measured and tabulated by BART for each of the sensitive receptors identified in the Town of Colma. Monitoring in the form of follow-up vibration measurements at each sensitive receptor shall be documented by BART immediately adjacent to each sensitive receptor during the time that construction of the BART extension is occurring. Monitoring in the form of follow-up photographs and written documentation of the structural condition and measurement of ground borne vibration shall be done by BART during the first year after the BART extension is in operation and again once each year for a period of five years after the extension project is in operation. Copies of the initial documentation and monitoring report shall be provided to the Town of Colma as they are completed. BART shall be responsible for mitigating damage to sensitive receptors resulting from ground borne vibration.”

**Response.** BART's design criteria address the noise and vibration levels allowed for in its train operations. In addition, BART also specifies allowable construction noise and vibration limits governing contractors. These are the conditions governing BART construction work and train operations. Except for the possibility of pile driving close to buildings in Colma cemeteries, none of the construction activities would produce enough vibration to cause damage. With respect to pile-driving and these other activities, the construction vibration limits contained in the BART design criteria are set to avoid significant annoyance to occupants of nearby buildings and low enough to avoid damage to buildings in the Town of Colma. Construction techniques would be similar to those used for the BART Colma Extension in which there were no significant impacts. Short-term monitoring of construction vibration will be part of the mitigation monitoring program to ensure compliance with project vibration limits. Long-term monitoring of BART operational vibration is not necessary because the vibration levels would be low enough to avoid significant annoyance to cemetery visitors and considerably below any building damage threshold.

BART specifications require the contractor to protect existing structures which remain in place during and after construction. A pre-construction survey of existing conditions of the ground surface and nearby structures will be performed by BART and its contractor. The survey will consist of surveys, settlement markers, photographs, videos, and a written report. In addition to chronological construction photographs and videos, BART specifies the requirement for placing settlement markers on adjacent structures. The markers are surveyed periodically to ascertain any movement. For the Colma Station Extension project, BART's contractors were able to perform

- work while supporting structures to zero settlement, which provides evidence that no structural damage has occurred as a result of BART's work.
- 29.41. Page 3.13-6 [of the DEIR/Technical Appendix]...It is unclear from the discussion what constraints, if any, would be imposed where proposed construction easements are drawn through or include existing buildings, structures, improvements, heritage trees and other sensitive features. This needs to be clarified.
- Response.** Please refer to Response 19.18 for a discussion of the two types of temporary construction easements.
- 29.42. The Town of Colma objects to the concept that once the easements are acquired the contractor can select the specific sites to be used. We request that the specific areas of use be carefully defined in consultation with Town of Colma representatives so that visual impacts can be minimized.
- Response.** The contractor would select the number and location of laydown areas in accordance with his/her operating plan. The contractor's use of these areas, however, must conform with the Town of Colma requirements, including visual considerations as stipulated in an agreement which will be negotiated between the Town and BART.
- 29.43. The proposed laydown area identified as "Strip of Land North of Serramonte Boulevard at El Camino Real" is not currently available. The historic Colma Train Station building was removed from an area of BART construction located along the CalTrain right-of-way between San Pedro Road and Washington Street in Daly City and relocated to the subject strip in 1994.
- Response.** Utilization of this parcel for a contractor laydown area will be coordinated with the Holy Cross Cemetery. The existing businesses are presently leasing land from the cemetery. Cemetery landowners have volunteered use of the property for contractor laydown and material storage areas. Where the proposed use of a laydown area conflicts with existing use, BART will coordinate with each property and business owner. If business is displaced due to BART construction, this business would be compensated in accordance with state and federal relocation laws.
- 29.44. The laydown area identified as "Holy Cross Cemetery Site on Mission Road" is encumbered by two commercial businesses having valid Use Permits with the Town of Colma.
- Response.** Based upon further discussions with the affected cemeteries, the laydown area has been reduced in size to avoid the two existing businesses and the existing water tank.
- 29.45. Page 3.13-13 [of the DEIR/Technical Appendix]...This section of the text states that haul routes to disposal sites would be predetermined in agreements with local authorities prior to starting construction. It should be noted that the Town of Colma General Plan has designated Serramonte Boulevard and El Camino Real as the two official haul routes through Colma.
- Response.** The commentor's information on this topic is noted.
- 29.46. Page 3.13-2[7] [of the DEIR/Technical Appendix]...The detailed discussion of this impact [Impact 1] does not state clearly that Olivet Parkway would be closed. Table 3.13-2, on page 3.13-10, shows that Olivet Parkway will be closed entirely for twenty-four (24) months. Olivet Parkway is the primary route for funeral processions from El Camino Real to Olivet Cemetery, and, at least one residential driveway is entered from Olivet Parkway. These impacts should be analyzed and suitable mitigation recommended....This comment also applies to the Base Case Analysis at page 3.13-24, the Alternative IV Analysis at page 3.13-37, the Alternatives V, V-A, V-B and Alternative VI Analysis at page 3.13-28.

**Response.** In response to comments, a plan to reduce the closure time for Olivet Parkway has been developed based on shifting the existing 42-inch RCP Storm Drain up to 25 feet northerly across lands owned by Eternal Homes and Cypress Abby Co. on a new utility easement. With this storm drain moved out of the roadway, the road can be raised up to 8 feet and decking installed to maintain traffic while the BART subway box is constructed below the deck. Olivet Parkway will be out of service approximately 2 months to complete this work. Following completion of the subway box, the road will again be closed for up to 2 months to remove the decking and restore the roadway. Traffic would be detoured to Hillside Boulevard, as noted in Impact 1 on page 3.13-27 of the DEIR/Technical Appendix. To make it clear that Olivet Parkway would be closed for limited periods, the last sentence on page 3.13-27, in the paragraph under Impact 1, of the DEIR/Technical Appendix is revised as follows:

Access to the Eternal Home Cemetery and Salem Memorial Park via Olivet Parkway would be detoured to Hillside Boulevard ~~and single provided with appropriate signage~~ in consultation with these cemeteries while Olivet Parkway is closed for two periods of approximately 2 months.

Page 3.13-34, Impact 1 under Alternative III, of the DEIR/Technical Appendix is revised as follows:

1. Construction of the retained cut alignment would require partial closure of Mission Road, Serramonte Boulevard, and Orange Avenue for two months and would impact traffic, transit, pedestrian, and bicycle circulation. Access to the Eternal Home Cemetery and Salem Memorial Park via Olivet Parkway would be detoured to Hillside Boulevard and signage provided in consultation with these cemeteries, while Olivet Parkway is closed for two periods of approximately two months. (I)

Page 3.13-37, Impact 1 under Alternative IV, of the DEIR/Technical Appendix is revised as follows:

1. Cut-and-cover construction across Mission Road, Serramonte Boulevard, and Orange Avenue would affect traffic, transit, pedestrians, and bicyclists using these streets. Access to the Eternal Home Cemetery and Salem Memorial Park via Olivet Parkway would be detoured to Hillside Boulevard and signage provided in consultation with these cemeteries, while Olivet Parkway is closed for two periods of approximately two months. (I)

Page 3.13-42, Impact 1 under Alternative V, of the DEIR/Technical Appendix is revised as follows:

1. Cut-and-cover construction would require lane closures on Mission Road Serramonte Boulevard, and Orange Avenue, and would affect traffic, transit, pedestrian, and bicycle circulation. Access to the Eternal Home Cemetery and Salem Memorial Park via Olivet Parkway would be detoured to Hillside Boulevard and signage provided in consultation with these cemeteries, while Olivet Parkway is closed for two periods of approximately two months. (I)

Page 3.13-46, Impact 1 sentence insert the following:

Access to cemeteries via Olivet Parkway would be detoured to Hillside Boulevard and signage provided in consultation with these cemeteries, while Olivet Parkway is closed for two periods of approximately two months.

29.47. Page 3.13-53 [of the DEIR/Technical Appendix]...The description of line construction addresses demolition, vegetation removal and relocation of existing structures and facilities. Clarification should be made to explain whether these activities apply to the entire right-of-way width only or to the right-of-way plus construction easement areas.

**Response.** Site clearance would occur in the right-of-way as well as on surface easement areas. Surface easements will be utilized for access and laydown by BART construction contractors.

29.48. It is also not clear from the discussion the extent to which the demolition, vegetation removal and relocation of existing structures and facilities also applies to the laydown areas.

**Response.** Please refer to Response 29.47.

29.49. Page 3.13-53 [of the DEIR/Technical Appendix]...It is unclear from the analysis what sixty (60) space parking lot would be temporarily displaced. The Town of Colma has an existing agreement with Holy Cross Cemetery for use of the BART right-of-way and some adjoining land which is privately owned by Holy Cross, for parking purposes. This parking area is essential for employees of the many businesses located along Mission Road. Without this parking Mission Road would be unmanageably congested. Mitigation in the form of an alternative, convenient parking location must be provided by BART during construction.

**Response.** The parking lot which would be temporarily replaced is located behind the nursery and San Francisco Water Department facilities along Mission Road. A plan to retain the maximum feasible number of parking spaces will be developed in cooperation with the City, BART, and local business merchants.

29.50. Page 3.13-54 [of the DEIR/Technical Appendix]...Construction of the BART extension will temporarily eliminate most of the [Guido] restaurant parking lot and will cut off access to the rear of the restaurant where food delivery and trash collection takes place. This is a significant short term impact that cannot be avoided unless tunnel construction is employed. We request that BART develop a means to allow reduced access to the rear of Guido's and substitute parking nearby in a number equal to that lost during construction. This comment also applies to the Base Case Analysis at page 3.13-57, the Alternative IV Analysis at page 3.13-59, the Alternative V Analysis at page 3.13-61, the Alternative V-A Analysis at page 3.13-62, the Alternative V-B Analysis at page 3.13-63 and the Alternative VI Analysis at page 3.13-64.

**Response.** Access to the rear of Guido's restaurant would not be eliminated under any of the BART build alternatives. An underground construction easement would be required for tie-backs of the subway box but such an easement would not have an impact to the restaurant building at the surface. The surface right-of-way to the rear of the restaurant required during construction would be located 30 feet to the east of the building and this requirement would temporarily reduce the number of parking spaces located to the east of the restaurant. A parking lot would be constructed adjacent to Guido's restaurant on the south side of the property to replace the parking spaces temporarily eliminated during construction activities.

29.51. Page 7-9 [of the DEIR/Technical Appendix]...We request that Table 7-1 be amended to include residential areas in Colma that will be affected by BART construction.

**Response.** Residential homes in Colma that would be affected by the project are scattered and thus are not defined as neighborhoods by the Town of Colma. Therefore, the homes were not included in the analysis. Please refer also to Response 29.15 and 29.52 regarding these residential areas in Colma.

29.52. Page 7-13 [of the DEIR/Technical Appendix]...[The Impact Analysis by Neighborhood] analysis is inaccurate and incomplete. The Meadowbrook Trailer Park is adjacent to Colma in

unincorporated San Mateo County. Residential areas of Colma will be affected by BART. These include the 18 unit Senior Housing Complex at 1180 El Camino Real, one residence at Olivet Parkway, one residence at Salem Cemetery, six homes at 1431-57 Mission Road and four homes behind Molloys at 1655 Mission Road.

**Response.** BART agrees that the Meadowbrook Trailer Park is adjacent to, and not a part of, the Town of Colma. BART has grouped the Meadowbrook area within the area of "Colma Neighborhoods" only to indicate geographical proximity and not to imply that the Meadowbrook area is within the incorporated portion of the Town of Colma. The commentator is correct in noting the existence of the 18-unit senior housing complex at 1180 El Camino Real, one residence on Olivet Parkway, one residence at Salem Cemetery, six homes in the 1400 block of Mission Road, and four homes in the 1600 block of Mission Road in the Town of Colma.

The Executive Order on Environmental Justice is directed at protecting "communities," which for purposes of this document is understood to mean neighborhoods. The residential units are not defined as a neighborhood by the Town of Colma, and they are not clustered together. Therefore, the homes were not included in the analysis as a community to be reviewed.

Moreover, it is not possible to define the demographic profile of the residents of a very small number of homes. For reasons of privacy, such data is not available through U.S. Census documents. Therefore, the residents of the units, or any group of the units, described cannot be profiled in terms of income or minority status, and therefore, no conclusions about impacts on low income or high minority populations can be drawn. Please refer also to Responses 29.15 and 29.51 regarding residential areas in Colma.

- 29.53. Page 96, Design Appendix, Figure 1, Street Construction Profiles...appears to show the proposed 42" R. C. drainage pipe to be above grade between approximately Station 13+00 and 14+25 in the profile drawing. This should be clarified. An exposed drainage pipe is unacceptable to the Town of Colma.

**Response.** The proposed 42-inch drainage pipe shown in the profile would be located in the cutbank along the northerly side of the Olivet Parkway. The pipe would be completely covered. The pipe is shown in this profile to verify that it would clear the BART subway structure.

- 29.54. [Resolution 95-12]...Alternative III, The Base Case, representing a retained cut configuration through Colma is rejected. All reference in the Draft EIR/Draft Supplemental EIS to Vertical Profile Options resulting in a retained cut configuration through Colma for any of the other construction alternatives is rejected. Alternative VI, subway to Millbrae Avenue via the Airport International Terminal which is the same as the Locally Preferred Alternative through Colma, is specifically endorsed subject to modifications requested in comments on the DEIR/SDEIS submitted by Colma to BART.

**Response.** The commentator's opposition to a retained cut configuration through Colma is noted. As discussed in Response 2.7, the BART and SamTrans boards have selected the Alternative VI Aerial Design Option as the LPA. The new LPA includes a subway alignment through Colma. BART is working closely with local jurisdictions during the LPA engineering design phase to incorporate as many proposed modifications as feasible.

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### 3.4 ORGANIZATIONS

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#### 30. AIR TRANSPORT ASSOCIATION

- 30.1. The airlines fully support the BART Extension Project to alleviate motor vehicle congestion and improve passenger and employee accessibility to SFO.

**Response.** The commentor's general support for the BART extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the Aerial Design Option LPA in November 1995. The Alternative VI Aerial Design Option was selected as the LPA by both boards (see Response 2.7 for a discussion of the LPA selection process).

- 30.2. The original Locally Preferred Alternative, the [1992] LPA, is far and away the best alternative overall...

**Response.** The commentor's support for the original 1992 LPA is noted. A new LPA was selected by the BART and SamTrans boards at the close of the public review and comment period. Please refer to Response 2.7 for a discussions of the selected LPA.

- 30.3. The "on-airport" alternatives are shown to be significantly more costly; more disruptive to airport operations and to local communities, particularly in terms of the numbers of displaced families; and they lack assured sources of funding.

**Response.** Alternative VI, Millbrae Avenue via Airport International Terminal, would disrupt San Bruno Avenue and would also have the highest capital costs, as shown in Table 6-1 on page 6-2 of the DEIR/Technical Appendix.

Table 6-1 identifies the estimated capital costs of all "on-airport" alternatives considered; Alternative VI is the most costly (\$1.269 million), followed by Design Option V-A (\$1.196 million), and Alternative IV (\$1.124 million). Alternative VI is not the most disruptive to the local community in terms of displacement. Design Option V-A potentially disrupts the most residents (650), compared to 600 residents for Alternative V and 560 residents for Alternative IV and 525 residents for Alternative VI (see Table 3.2-3). Other land use impacts are described in Chapter 3.2 the DEIR/Technical Appendix. The revised Financial Plan for the LPA is described in Chapter 7, Volume I of this FEIR/FEIS.

As noted in Response 2.7, the commentor's input regarding the merits of the various alternatives was considered during the LPA selection process.

- 30.4. Alternative VI is problematic because the station would be a considerable distance from the domestic terminals and not even within the proposed new international terminal....Passengers would have to walk, with luggage, through a maze of tunnels several hundred feet in length to reach elevators or a series of escalators to ascend from the subway station to the ticketing level. Passengers and employees destined for the domestic terminals would still have to proceed to the international terminal mezzanine in order to board the ALRS.

**Response.** In September 1995, the Airports Commission, and the BART and SamTrans boards of Directors adopted "Passenger Service Quality Standards" with regard to the proposed location of the BART station on SFIA. The standards include the expectation that 50 percent of BART passengers would be able to arrive at the first ticket counter for any airline within a four- to five-minute walk. The International Terminal station design achieves this goal. Under Alternative VI, the walking distances and travel times for a patron using the BART station adjacent to the proposed International Terminal would be shorter than any other alternative presented in the

DEIR/SDEIS, but not shorter than the Aerial Design Option LPA. In fact, over 75 percent of the users going to the terminal area and GTC could walk and would not have to ride the ALRS under Alternative VI. Patrons going to Boarding Area D, which will have less than 20 percent of the activity, and remote employee areas north of the terminal area could ride the ALRS. Luggage check-in facilities would be provided at the terminal end of the mezzanine level of the BART station; a system similar to curb-side check-in now in use could be implemented.

Please also refer to Response S50.2 for a discussion of baggage check-in areas at the station.

- 30.5. The airlines seriously question assumptions relied upon in the BART/SamTrans Transportation Technical Report of December 1994, particularly the conclusion that the Alternative VI station would be within walking distance to final destinations of 75 percent of air passengers and 90 percent of employees working in the terminal areas.

**Response.** Please refer to Response 30.4 for a discussion of walking distances. BART staff estimates that individuals arriving at BART's International Terminal Station at the SFIA under Alternative VI would reasonably be expected to walk for six minutes, covering a distance of approximately 1,500 feet, to reach their destination within the airport. Based on current data on terminal use provided by the SFIA, 75 percent of air passengers would be within walking distance to their airline terminal from the International Terminal BART Station.

Using the same criteria to establish the threshold time/distance for walking versus transferring to the ALRS (6 minutes - 1,500 feet), and the assumed employee distribution, 90 percent of employees working in the terminal areas would be within walking distance from their destination.

- 30.6. With Alternative VI, CalTrain riders to SFO would be particularly inconvenienced. They would have to transfer first to BART at an "off airport" station, pay an additional fare, ride one stop to the "on airport" stop, and then walk or take the ALRS to their terminals or worksites.

**Response.** CalTrain riders transferring to BART in Millbrae to access the SFIA would most likely have no added fare for this segment of the trip. Although the travel time is somewhat greater than in other Alternatives, only 39 percent of the CalTrain riders would have to make a second transfer to access Concourse C or the remote employee areas. In addition, please refer to Response 66.111.24 for a discussion of transfers between BART, CalTrain and ALRS.

- 30.7. With immediate connection to free Airport Light Rail Trains at 90-second intervals, and 2- to 3-minute rides for passengers and employees directly to all terminal ticket counters and airport worksites (with returns directly from baggage claim areas) -- the location of the BART stop half a mile away from the terminal area is immaterial in terms of passenger convenience and achievement of overall rapid transit objectives.

**Response.** The International Terminal Station design under the Aerial Design Option LPA will permit 50 percent of BART passengers to arrive at the first ticket counter for any airline within a four to five minute walk or walk-ride. The BART International Terminal Station under Alternative VI is within walking distance for 75 percent of air passengers, or 1500 feet from the BART station to airline ticketing counters. The preference indicated by voters in San Mateo and San Francisco Counties as well as by the Bay Area public in extensive surveys is that a BART terminal be located inside the SFIA. Passenger convenience is achieved by serving their preferences, which is one objective of the BART extension.

The ALRS will provide 1-2 minute trips between each station/terminal stop on the loop around the central parking garage, not 2-3 minute rides directly to all terminals from any origin. Additional time is required to ride escalators down from the ALRS platforms, walk across the pedestrian bridges which are 1 to 2 levels above the departures level and ride escalators down to the departures/ticketing level. Accessing the baggage claim level requires using another set of

escalators. Therefore, access to SFIA via the ALRS from BART stations located to the west of Highway 101 to any ticketing counter/terminal area would have a greater access time than would be provided by the BART station under the Alternative VI LPA or the Aerial Design LPA for any terminal location.

- 30.8. While a complete review of the projected Alternative VI cost is hampered by the absence of any detailed construction cost breakdown in the Draft EIS, we do not believe the planners have taken into consideration, for example, that extensive tunneling would have to be performed in order to avoid major disruptions in airport operations and services during the construction period.

**Response.** The cost estimates shown in the DEIR/SDEIS for Alternative VI include the cost of tunneling the alignment under the Airport from property line to property line. Tunneling would begin at the SFIA property line, continue east and south near the International Terminal and GTC, and continue in tunnel south and west to the Airport's western property boundary. Cut-and-cover construction of the alignment is not planned for airport property, and a construction schedule is being coordinated closely with the Airport's construction schedule for its Master Plan projects to minimize any possible disruption to airport activities.

However, the Aerial Design Option LPA does not require tunneling beneath the AOA, existing concourses or the rental car garage. Access and the station are both in aerial configuration, and construction east of the western side of Highway 101 would be managed by SFIA, thereby easing integration with the construction associated with the Master Plan projects.

- 30.9. Unforeseen delays and cost over-runs would undoubtedly occur and greatly inflate the cost of Alternative VI or other "on airport" options that do not follow the existing CalTrain right-of-way. For instance, in addition to indefinite delays associated with locating the additional funding, changes would have to be made to the SFO Master Plan for airport expansion and modernization. Time-consuming permits would have to be obtained and structural modifications and improvements would have to be made to existing airport facilities to accommodate BART tunnels and the underground station.

**Response.** While delays and cost overruns are not unknown in construction projects of the magnitude proposed by BART and SamTrans, every effort is being made to reduce this possibility by working closely with SFIA to coordinate the design, engineering, and construction schedule of the BART alignment and station with those of the International Terminal, Ground Transportation Center, and ARLS.

The Contingency and Reserve element of the financial plan for the Aerial Design Option LPA contains \$77.8 million, and has been established to cover delays and project cost changes. SFIA remains committed to permitting the extension of rapid transit to the airport for the convenience of passengers, visitors, and employees, and BART and SamTrans continue to work closely with SFIA staff to manage the integration of construction schedules and design features of the airport's International Terminal and RCG.

- 30.10. The \$44 million cost of the ALRS, which ultimately will be borne by passengers, shippers, and other airport users, is improperly excluded from the EIS financial analysis of Alternative VI.

**Response.** As noted in the text, the \$44 million shown as ALRS costs are only those costs associated with extending the system to a BART station west of Highway 101 or elsewhere on SFIA property. Coverage of the cost is a decision of SFIA. Since the Aerial Design Option LPA would locate the station at the International Terminal, the airport would not be required to cover the cost of extending the ALRS to a station located elsewhere.

- 30.11. Throughout the EIS, the suggestion is made that the shortfall in funding of any BART option finally selected is expected to be covered by airport funding sources. In the airlines' view, this assumption is legally erroneous.
- Response.** The DEIR/SDEIS reflects the commitment of SFIA to cover up to \$200 million of the costs associated with on-airport construction under the Aerial Design Option LPA or Alternative VI, and does not intend to imply that any funding shortfall for any alternative would be covered by airport funding sources. SFIA has several legal options available to it to cover the cost of its commitment, and is expected to define the financing plan for its portion of project costs.
- 30.12. The public also must not be misled into thinking that approval of a PFC [Passenger Facility Charge] to cover the unfunded portion of the selected BART alternative will somehow relieve SFO users of this economic burden. To the contrary, PFCs essentially are local user taxes that would be paid directly by airline passengers on every ticket for travel to and from SFO.
- Response.** Passenger Facility Charges are locally generated funds, imposed by an airport at a rate of up to \$3.00 per enplaning passenger, with revenues used for airport improvements related to passenger service. PFC revenue could be used as legally appropriate to cover a portion of the on-Airport costs of a BART extension. As noted in the DEIR/SDEIS, SFIA does not now have a PFC in place.
- 30.13. Construction of underground tunnels and a terminal area station would cause substantial passenger inconvenience and major disruption to on-going airport operations, including closure of roadways, sections of terminal buildings and parking facilities, aircraft parking areas, elevators, and baggage handling systems.
- Response.** Any construction activity at the Airport, whether BART or airport expansion, will be somewhat disruptive to current activity patterns. As with any urban use, it will be necessary to develop a plan that minimizes potential disruption and allows all functions to continue. The Aerial Design Option LPA does not involve subway construction. All design and construction east of Highway 101 would be undertaken by SFIA and coordinated with Master Plan construction. Significant environmental impacts associated with BART activities are analyzed in the DEIS/SDEIR and FRDEIR/S#2DEIS.
- 30.14. The airlines believe that confirming the selection of the original [1992] locally preferred alternative (LPA) offers the best opportunity of seeing this project come to fruition. The airlines, however, are equally opposed to the other alternatives which incorporate stations on the airport premises....
- Response.** The commentor's opposition to alternatives that feature stations on SFIA premises is noted. Please refer to Response 2.7 for a discussion of the LPA selected by the BART and SamTrans boards at the close of the FRDEIR/S#2DEIS public review and comment period.
- 30.15. Any distinctions in transit use suggesting a possible advantage associated with Alternative VI are statistically insignificant or unreliable. Indeed, the extensive adjustments of the MTC model were highly unorthodox and undermine the validity of many of the conclusions drawn therefrom.
- Response.** The adjustments to the MTC model were not unorthodox and did not undermine the validity of the results. MTC staff responsible for the travel demand model were consulted before, during and after any adjustments were made, as discussed in the Transportation Technical Report. The estimate of patronage to and from SFIA was developed from a mode choice micro-model created by an independent consultant under contract to MTC. The micro-model considered the allocation of Bay Area travel among the three major airports and took into account more than 20 separate modes of travel, including all of the various airport shuttles. This micro-modeling included detailed information about walk time between travel modes and from one mode to

terminal counters. Such detailed information was not contained in MTC's regional travel demand model. The range of transit patronage estimates among the BART build alternatives are relatively narrow. Travel time is a major factor in the estimation of transit patronage and the differences in travel time between the BART build alternatives was small. Alternative VI has more total patronage than the other BART build alternatives, in part, because the end-of-the-line station is farther south providing more extensive geographical coverage of San Mateo County.

- 30.16. Under Alternative VI the station would be a considerable distance from the domestic terminals and not even within the proposed new international terminal. Passengers and employees, even those going to the international gates, would have to walk, with luggage, through a maze of tunnels several hundred feet in length to reach elevators of a series of escalators to ascend several levels from the BART Station. Those destined for the domestic terminal areas then would have to walk though a circuitous route in order to reach the terminal, followed by another trek to their gates.

**Response.** Please refer to Response 30.4 for a discussion of the walking distance from the Airport International Terminal Station and other SFIA destinations.

- 30.17. Approximately 20,000 of the airport's 31,000 employees work outside the main terminal areas. These riders would have to transfer to the ALRS regardless of the location of the BART stop, an issue which is ignored completely in the DEIR/SDEIS.

**Response.** The location of airport employment was considered in the mode choice modeling for the BART extension DEIR/SDEIS. BART staff, in reviewing the travel demand model results, estimated that of all airport employees using BART to travel to the SFIA, 40 percent would walk to their destination under Alternative VI and 60 percent would transfer to the ALRS from the International Terminal Station. Alternative IV would have some worker walk access because the Long-Term Parking Station is close enough to walk to the UAL Maintenance Base. Alternative V-A has walk access to the terminals because of the proximity of the Airport GTC Station. Detailed station entries and exits table in Appendix B of the DEIR/Technical Appendix provides this information for each alternative studied.

- 30.18. With respect to Alternative VI, CalTrain riders to SFO would be particularly inconvenienced. They would have to transfer first to BART at an "off airport" station, pay an additional fare, ride one stop to the "on airport" stop, and then walk or take the ALRS to their terminals or worksites. Under the [1992] LPA, they would make just one transfer at the intermodal station directly to the ALRS. Also, under the [1992] LPA, BART commuters traveling beyond the airport in either direction would not be inconvenienced by increased travel time for an "airport loop" and a second stop for embarkation and debarkation of airport passengers.

**Response.** CalTrain riders who transfer to BART for access to SFIA under Alternative VI or the Alternative VI Aerial Design Option may not be required to pay an additional fare on BART but may receive a transfer from CalTrain facilities. The decision on having a transfer fare or not, would be made by the JPB and SamTrans in conjunction with BART. Under all of the BART build alternatives and the TSM Alternative, CalTrain riders traveling to SFIA would be required to transfer to a transit system at an "off airport" station. Please refer to Response 11.2 for a discussion of travel time comparisons between the ALRS and BART. Also, please refer to Response 66.111.24 for a discussion on the need for CalTrain riders to transfer twice, once to BART and then to the ALRS.

- 30.19. Other alternatives with stations on the airport premises that have been evaluated in the past reportedly would have cost on the order of \$400 to \$500 million more than the external station alternative. There does not appear to be any rational explanation why the cost differential between the [1992] LPA and Alternative VI currently is estimated to be only approximately half the cost difference between external and internal stations identified in the past, particularly given that (1) Alternative VI -- unlike the previous internal station alternatives -- continues beyond the airport and is between 0.6 and 1.1 miles longer than the previous alignments, and (2) costs must certainly

have increased due to inflation in the past 3 years. Thus, the capital cost estimate for Alternative VI is suspect at best.

**Response.** It is unclear what cost estimates the commentator is referring to in stating that "other alternatives...evaluated in the past" with on-airport stations cost \$400 to \$500 million more than the external station alternative. There is, in fact, no pair of alternatives where the only difference is an on-airport or off-airport station. All cost differences include more features than just station location. The commentator may be referring to the estimated cost of all on-airport construction in Alternative VI. On-airport construction, including "soft" costs, was estimated at \$350 million to \$400 million, of which SFIA committed to covering \$200 million. The estimated capital cost of the Aerial Design Option LPA in 1997 dollars is \$1,054 million. Please refer to Chapter 6 in the FEIR/FEIS for a discussion of the projects' current financing plan.

- 30.20. The [operations and maintenance] O&M costs relating to the [1992] LPA and Alternative VI are also questionable. Previous evaluations concluded that the O&M costs for the external station alternative were less than that for the internal station. The DEIR/SDEIS, however, purports to show the O&M costs to be greater for the [1992] LPA than for Alternative VI, notwithstanding the additional track. It is difficult to imagine that capital costs and CEI figures would continue to show the internal station alternative to be the more costly alternative, but O&M costs would be higher for the shorter external station alternative.

**Response.** Table 6-2 of the DEIR/Technical Appendix, "Estimated Operating and Maintenance Costs in 2010," contains a typographical error. Costs for operation of the 1992 LPA (and I-380 Least Cost Design Option) should be \$10.0 million lower than shown. Thus, O&M costs for the 1992 LPA and Design Option should be \$304.4 million in annual costs, \$33.8 million as the "Difference from No-Build," and \$30.6 million as the "Difference from TSM." This has been corrected, as shown in the FEIR/FEIS. There is no error in the text associated with the table.

- 30.21. The O&M cost data is contradictory, with Table 6-2 indicating higher O&M costs for the LPA, and Table 6-10 showing higher O&M costs for Alternative VI. This inconsistency, with historical data along with the clearly contradictory data in Table 6-10, indicates that the O&M figures represented in Table 6-2 are unreliable.

**Response.** Please refer to Response 30.20 for a discussion of the error in Table 6-2. Table 6-10 is correct as printed.

- 30.22. These inconsistencies underscore the need for the supporting cost documentation to be made available to the public. Without that information, the meaningful public review of the costs and comparison of the relevant alternatives contemplated by the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) is not possible. In this case, if the costs are understated, the cost-effectiveness of Alternative VI may not be worse than realized. The public is entitled to this information.

**Response.** Please refer to Response 30.20 for a discussion of the error in Table 6-2. Information on the O&M costs of the Aerial Design Option LPA is included in this FEIR/FEIS.

- 30.23. The DEIR/SDEIS does not adequately consider the legal limitations which indicate that the costs associated with the BART project will not be eligible for PFC funding....Based on federal mandates, PFCs only may be used to cover costs associated with the on-airport portion of the project that is owned and operated by the airport authority, and only if the costs meet other eligibility criteria....Thus, the DEIR/SDEIS's reliance on an annual revenue of \$45 million from PFC revenue is vastly overstated. Moreover, this PFC revenue may only be used to offset the local match of the PFC-eligible portion of the project, which is only a minimal and inconsequential portion of the entire project cost. Airport receipt of any FAA grant funding, whether discretionary or entitlement, is subject to strict requirements concerning the use of such funding. Alternative VI as currently designed includes a number of costs which are ineligible for

AIP funding. As part of the DEIR/SDEIS Financial Analysis section, BART indicates that SFO could receive grant funds from the FAA to fund capital projects....It is not likely that SFO will be able to allocate much of the cost of the BART system to its FAA entitlement funds nor will the project be ranked highly for receipt of aviation dollars when the project has already received earmarked ISTEA authorizations.

**Response.** PFCs will be used as legally appropriate, if used at all. Please refer also to Response 24.86, 24.87, and 24.88 for a discussion of on-airport costs.

- 30.24. In Table 6-6 of the DEIR/SDEIS, BART outlines the proposed uses for each of the projected revenue sources. The chart states that "Airport Funds" reflected in this chart are intended to include PFC revenue, the allocation to "Highway & Streets" would be inappropriate since off-airport highways and streets would not meet the PFC eligibility requirements outlined above.

**Response.** In Table 6-6, airport funds should only be shown to be supporting transit capital (first column), not transit operations and maintenance and streets and highways capital. The correction has been made in the FEIR/SFEIS.

- 30.25. In order for SFO to receive additional discretionary grants and to allow it to receive its continued entitlement funds, the airport must declare that its revenues are only expended to support the capital or operating costs of: (1) the airport, (2) the local airport system, or (3) other local facilities owned and operated by the airport which are directly and substantially related to the air transportation of passengers and property. Use of airport revenues to support the entire BART system may violate this grant assurance. Of most concern is the fact that the BART system will not be owned or operated by the airport.

**Response.** FAA grant funds (entitlements) are listed as a potential revenue source for eligible project costs. Portions of the BART extension project are eligible to use such funds. Please refer to Responses 30.23 and 30.26 for a discussion of use of PFC revenues.

- 30.26. Any money provided by the federal government to SFO to enhance airport planning, development, or capacity cannot be counted as local matching funds for the BART extension project. Thus, any effort by BART to use other federal sources for the local matching portion will be unsuccessful.

**Response.** Project funds provided by the federal government through SFIA would not be used to match other federal funds. Airport-generated revenues and PFC revenues are both local funds, and could be used as legally appropriate to generate the \$200 million commitment SFIA has made to completion of the Aerial Design Option LPA or Alternative VI.

- 30.27. BART's ability to use airport revenues for the local match of the entire BART project will be met with carrier opposition and will result in a blatant violation of the airport's current grant assurances.

**Response.** Please refer to Responses 24.86, 24.87, and 24.85 for a discussion of SFIA's maximum contribution to the proposed project.

- 30.28. BART will have to acquire the necessary right-of-ways and easements from SFO to extend BART onto airport property. No express provision is contained in the DEIR/SDEIS outlining what type of property interest BART will obtain.

**Response.** SamTrans will be acquiring any necessary property interests for this project. The type of property interest acquired will be tailored to the nature and extent of use required in each case. All necessary property rights required for the proposed project on SFIA lands will be set forth in an agency-to-agency agreement in the form of a Memorandum of Understanding (MOU). The

MOU will outline the real property interest, term and means of conveyance of necessary property rights.

- 30.29. The local financing proposed by BART for Alternative VI, when excluding the federal airport program revenues, is wholly inadequate to meet the criteria as required by the law. BART has not provided adequate and stable contingency amounts and the increased costs of Alternative VI only exacerbate this problem.

**Response.** The local financing proposed for the LPA includes \$99 million from SamTrans, \$98 million from the State of California, and \$200 million from SFIA. At the time of publication of the DEIR/FEIS, the remaining \$72.23 million required by Alternative VI constituted 5.7 percent of total project costs, an amount that could reasonably be expected to be covered by other non-federal resources. Please refer to Chapter 6 in the FEIR/FEIS for a discussion of the project's current financing plan.

The Contingency and Reserve line item is calculated at approximately eight percent of all BART costs, as seen in Table 6-1. Note that the Contingency and Reserve is applied even to non-construction items, including Engineering Services, Mitigation of Environmental Impacts, and Insurance. The eight percent figure is appropriate because costs were defined after completion of more engineering than seen in most projects of this type.

BART, SamTrans, and MTC are actively pursuing federal New Rail Starts funds (49 U.S.C. Section 5309) for the extension in the interest of enhancing rail transit service in the Bay Area. The extension is authorized under the Intermodal Surface Transportation Act of 1991 (ISTEA) to share \$568.5 million in Section 3 New Starts appropriations with BART's Colma extension and Santa Clara County Transit District's Tasman Corridor light rail project. In accordance with Section 3032 g(2) and Section 3(a)(4)(e) of the Federal Transit Act, both projects are entitled to Full Funding Grant Agreements that go beyond the current authorization if necessary, and to use the surplus in the Mass Transit Account of the Highway Trust Fund to support a multi-year funding commitment that fully funds both projects. See the Financial Analysis Section in Chapter 6 of the FEIR/FEIS for a discussion of the funding proposed for the project.

- 30.30. BART's reliance on receipt of additional federal funding to complete the BART extension is misplaced given the tight fiscal constraints imposed on the federal government.

**Response.** In response to concerns regarding federal participation in the project, BART and SamTrans proposed the Aerial Design Option LPA as an option to Alternative VI, which resulted in costs being reduced by approximately \$200 million. This resulted in the proposed federal share declining from \$800 million to \$750 million, including financing costs and escalation. Please refer to the Financial Analysis, Volume I of the FEIR/FEIS, for a discussion of the current funding plan and the funding sources.

- 30.31. BART should select a project alternative that will leverage the amount of federal revenue and airport fees that can be used to pay for the project instead of promoting alternatives that will only increase the amount of money the local citizens will have to contribute....BART could consider classifying the extension as an airport project to the extent that BART operates on airport property. Under this classification, BART must either concede control of the system to SFO or construct BART in such a way as to connect it to SFO's ALRS. Under the latter proposal, BART need not consider the ALRS costs because funds have previously been allocated to fund this project by SFO. Depending on the precise construction of the system, PFC revenue may then be able to be used to fund some portion of the costs to connect the ALRS to BART and other eligible costs.

**Response.** Comment noted.

- 30.32. The DEIR/SDEIS provides insufficient funding information upon which to make a reasoned comparison of the project alternatives.

**Response.** Please refer to Response 14.93 for a discussion of the financial plan included in the DEIR/SDEIS.

- 30.33. The DEIR/SDEIS identifies state TCI funds as meeting approximately 10 percent of the total project costs. Given that TCI funds are derived from a combination of state taxes on motor fuels, predicting their future availability is a less-than-certain science....Funding from SamTrans, another significant portion of the local contribution to this project, is equally, if not more, subject to the risks associated with reliance on sales tax revenues....The current DEIR/SDEIS neither identifies nor analyzes the risks associated with state and local sales tax-based funding....The DEIR/SDEIS fails to consider the possibility of funding shortfalls caused by economic fluctuations or by a variety of potential legislative actions, including budget cuts, tax law amendments, or changes in state funding priorities.

**Response.** The \$98 million in state TCI funds committed to the project are derived from gasoline sales taxes. TCI funds were committed to the BART extension in a 1988 California Transportation Commission (CTC) resolution. BART has received nearly \$122 million in TCI funding since 1988, or an average of approximately \$20 million per year. Over the same period, BART has received approximately 18 percent of the total statewide TCI funding. The CTC has met every commitment it has made to transit projects and considers the BART extension to be one of its highest priorities.

Please refer also to Response 14.93 for a discussion of the financial plan included in the DEIR/SDEIS.

- 30.34. The DEIR/SDEIS relies on other unproven and uncertain local funding sources to make up an additional local funding shortfall of up to 21.4 percent of capital costs (for Alternative VI)....Obtaining state legislative or popular approval for any tax or fee increase measure, given the current political climate, seems highly unlikely at best....The DEIR/SDEIS appears to reflect erroneous assumptions as to the legal and practical availability of any such potential funding sources...All of the potential regional and local tax or fee mechanisms suggested in the DEIR/SDEIS would produce relatively insignificant revenues in light of the size of the funding shortfall for several BART alternatives....

**Response.** The DEIR/SDEIS provides a list of "potential revenue sources," as noted in text and the titles of Tables 6-6 and 6-8. The Aerial Option LPA does not have an unfunded local share. Alternative VI has an unfunded local share of \$72.23 million, or 5.7 percent of project costs. Please see also Response 14.93 for a discussion of the proposed financial plan.

- 30.35. The DEIR/SDEIS at least clearly identifies the consequences should funding not become available for subway construction under the LPA. In contrast, the DEIR/SDEIS does not address the consequences of a failure to secure such funds under the other build alternatives.

**Response.** The commentor is correct. Please refer to Response 14.93 for a discussion of the financial plan included in the DEIR/SDEIS.

- 30.36. The DEIR/SDEIS attempts to minimize the substantial disruption to airport operations and patrons that construction of a station on the airport premises will cause....Construction of the underground tunnels and station will cause major disruption to the airport, including closure of roadways, baggage carousels, and elevators.

**Response.** Please refer to Response 30.13 for a discussion of minimizing disruptions of airport operations.

30.37. The DEIR/SDEIS...concludes that groundwater control measures and selection of an appropriate tunnel mining method would be sufficient to mitigate these [ground settlement] impacts. It is unrealistic to suggest that the mitigation measures would eliminate the differential settlement; therefore, impacts to the existing improvements on the airport are inevitable.

**Response.** The Construction/Geology section of the DEIR/SDEIS does not indicate that the mitigation measures would eliminate differential settlement. Although some small degree of settlement always occurs with tunneling, settlement will be kept to a minimum through appropriate construction techniques. Also, since the proposed tunnel under the SFIA property under Alternative VI is anticipated to be at a depth of 40 feet below the ground surface, ground settlement impacts are expected to be minimal.

Mitigation of tunneling-induced settlement is discussed on pages 3.13-117 and 3.13-118 of the DEIR/SDEIS. Acceptable limits for settlement will be confirmed based on the results of site-specific geotechnical studies performed during final project design. Established settlement limits will be enforced by BART during construction. In addition, coordination meetings have been held between SFIA and BART staff members to identify potential disruptions to Airport operations and access, and to identify methods to minimize or eliminate these disruptions. For example, tunneling equipment and methods can be selected to minimize settlement. Soil stabilization methods, such as soil mixing or jet grouting, can be performed in advance of construction to minimize or eliminate settlement. For utility lines, the installation of articulated joint connections in advance of construction can protect against settlement-related damage.

30.38. Alternative VI...creates a substantial potential risk to the underlying aquifers because tunneling for this alternative will penetrate the Bay Mud Aquitard which is currently protecting the aquifers from contamination; and second, the increased risk that exists if the Bay Mud layer is penetrated will have a ripple effect on approved airport projects and planned remediation that could require costly modifications to those programs in order to provide additional safeguards.

**Response.** As part of the planning process, BART has conducted a detailed review of available environmental and geotechnical data for areas adjacent to and within SFIA. All available data indicates that the Bay Mud Aquitard is continuous throughout the area traversed by the proposed Alternative VI tunnel alignment and would prevent downward migration of contaminants. There is no evidence of contamination in the underlying Westside Basin Aquifer. The proposed tunnel alignment would be located well below the Bay Mud Aquitard, would not penetrate it, and therefore would not affect it as a seepage barrier. This will be confirmed by site-specific geotechnical studies performed during project design. Additional field studies are currently in progress by SFIA to confirm the absence of contamination below the Bay Mud Aquitard.

Penetration of the Bay Mud Aquitard would occur under alternatives incorporating ventilation shafts and the cut-and-cover station. In these cases, BART will employ sealants such as slurry walls, cut off casing, sealing grout, or other appropriate methods based on the results of site-specific geotechnical investigations performed during project design.

Please refer to Responses 3.8 and 24.71 for further discussion of maintaining the integrity of the Bay Mud Aquitard.

30.39. The transportation analyses are reportedly based on the use of the regional travel demand model that had been approved for use on this project by the FTA. However, the primary thrust of the Transportation Technical Report (Transportation Projections and Analysis Methodology Memorandum) seems to be a description of an extremely convoluted series of "adjustments" to the approved model forecasts....The traffic impact analyses seem even more "adjusted" and arbitrarily constrained....[One] has to question the logic behind adjusting the supposedly FTA-approved trip tables so that the assignment matches the "observed" traffic counts, then further modifying the assignment of modeled traffic by adjusting the forecasted link volumes (roadway segment volumes), and then ultimately manually applying "judgment" to further modify the forecasted

traffic volumes at intersections before assessing and reporting the projected level of service. This process seems highly prone to error at best, and distortion at worst...

**Response.** The MTC travel demand model is the FTA-approved model for the Bay Area region. Both MTC and FTA staff understand that the MTC model is not appropriate to forecast turning movement at specific locations. As done by the Congestion Management Agencies of local counties, sub-area models are used to forecast volumes on local roadways that are not included in MTC's travel demand model. To calibrate these sub-area models to be as accurate as possible, field counts are used for comparison to the model's results. The process used to adjust the sub-area model results to individual intersection turning movements is recognized and approved by MTC staff. While the process is complex, it is not arbitrary but rather accepted industry practice.

Adjustments included micro-corrections to the model where localized effects were not addressed, e.g., walk versus transfers to the ALRS at the Airport International BART Station, and adjusting the number of trips at the request of the Cities to reflect trips not included in the MTC model, e.g., SFIA Master plan growth beyond projections by ABAG. The other adjustment referred to in the comment was not an adjustment but rather the conversion of the person trip tables into vehicle trip tables used for the traffic analysis.

- 30.40. BART underground tunneling may penetrate the Bay Mud Aquitard and create a mechanism of communication and transport for contaminants from the shallow fill zone above it, to the lower drinking water zone of the West Side Basin Aquifer.

**Response.** Please refer to Response 30.38 for a discussion of construction techniques to prevent penetration of the Bay Mud Aquitard.

- 30.41. BART has indicated that it does not intend to address fully the nature and extent of hazardous materials contamination on this portion of the project corridor until after selection of the preferred alternative. While this will presumably occur prior to property acquisition and construction activities, selection of Alternative VI, if it occurs, will already be problematic at that point. Further, the public and the decision makers will not have had an opportunity to consider this significant information in evaluating the merits of the alternatives.

**Response.** Evaluation of potential hazardous materials contamination is performed in a series of distinct phases. The first phase involves data and literature searches, agency contacts, and physical inspections for evidence of contamination. This phase is largely a research exercise and is intended to disclose whether there is reason to suspect contamination. This level of analysis has been performed for the BART project alternatives. The next phase is to perform limited sampling to better define the character and extent of the suspected contamination: this effort is much more involved, costly, and requires obtaining access to private property. For these reasons, this phase is typically deferred until a preferred alignment has been selected. The information presented in the DEIR/SDEIS is sufficient to inform the decision-makers of any known potential significant environmental effects and to qualitatively judge whether one alternative might be preferable to another.

- 30.42. According to the DEIR/SDEIS, if contamination is identified during the site investigation associated with Alternative VI, BART would report the contamination to the regulatory agencies with jurisdiction over the hazardous material that had been released. Responsible parties would then, it is assumed, perform additional investigations and cleanup under the review of responsible regulatory agencies, as necessary. However, in this instance, the responsible party would be BART....

**Response.** Under the terms of the California Regional Water Quality Control Board Order 95-018, Site Cleanup Requirements, dated January 18, 1995, SFIA and its tenants are currently under order to remediate contaminated areas within the Airport. This work is scheduled to be completed prior to the start of construction for BART facilities.

Please refer to Response 24.72 for a discussion of parties responsible for remediation at SFIA.

- 30.43. The DEIR/SDEIS acknowledges that mitigation and remediation activities presumably would have to be completed before construction could proceed at the SFO site. Apparently on this basis, the DEIR/SDEIS concludes that the risk of exposure to hazardous materials during BART construction operations would be "insignificant." However, if BART construction activities become the source of ground water contamination by compromising the Bay Mud aquitard..., that conclusion is unsupportable.

**Response.** Please refer to Response 30.38 for further discussion of construction techniques to reduce the risk of compromising the Bay Mud aquitard to "insignificant."

- 30.44. The prospect of construction activity that would cause such contamination and render BART as a Discharger in potential violation of a RWQCB order, or subject to a private cause of action or citizen's suit under the Clean Water Act or California law, raises serious concerns about the possible selection of Alternative V-A or VI. Activities that might cause such contamination in the face of knowledge of the present situation of San Francisco and San Francisco County as Dischargers associated with potentially actionable releases not only might result in legal liability for BART as a result of its construction activities, but also engender litigation against it for injunctive relief and monetary damages that could significantly increase the project's costs and/or delay its completion indefinitely....

**Response.** Please refer to Response 30.38 for a discussion of the low probability of contaminant migration to the Westside Basin Aquifer from BART construction activities.

- 30.45. Sufficient studies have not been made to evaluate the full impact of residential and business displacement caused by the BART-SFO expansion project, in terms of cost or the ability of project sponsors to provide sufficient mitigation. Additionally, inadequate consideration has been given to the secondary impacts of displacement, such as the elimination of low-income housing in an area already suffering from a shortage of such housing.

**Response.** Please refer to Responses 16.16 and 16.99, and 72.189 for a discussion of relocation and replacement housing. A Final Relocation Plan has been prepared and is included in Volume V, Technical Appendices of this FEIR/FEIS. It provides detailed information on the costs associated with displacement. In the DEIR/Technical Appendix for each alternative that would displace housing, a section on the impact on the supply of low cost housing is included; see, for example, page 3.2-62.

- 30.46. However, the DEIR/SDEIS documents provide no analysis of displacement costs, nor do they even provide a separate break-out of the estimated displacement costs for each alternative.

**Response.** As described in Response 16.16, the steps leading to a Relocation Plan (which will include relocation cost estimates) will be conducted once an alternative has been selected and further design work allows more accurate estimates of required property acquisition. Please refer to pages 3.2-56 and 3.2-57 of the DEIR/Technical Appendix for a description of the process.

- 30.47. BART has refused to provide the ATA with any substantive displacement cost data or analysis supporting the information in the DEIR/SDEIS....Its failure to make such information available undermines the public's ability to participate in this review process.

**Response.** Please refer to Response 16.16 for a discussion of tenant relocation benefits, 16.99 for a discussion of replacement housing, 72.189 for a discussion of the type, availability, and reimbursement for replacement housing, 30.45 for a discussion of the project's impact on the supply of low-cost housing, and 30.46 for a discussion of displacement cost estimates.

30.48. Because many of the residents displaced by Alternative VI currently live in low-cost housing, providing them "last resort housing" -- by paying higher rents for available, but higher-cost, housing -- could add considerable cost to the project...Even without any precise cost figures, rough cost calculations based on these observations raise the specter of soaring costs to relocate an additional 400 residents. At the very least, these concerns raise a question of an order of magnitude difference in displacement costs between the LPA and Alternative VI that goes beyond the \$2.9 million identified in the DEIR/SDEIS.

**Response.** Last resort housing is not expected to be required for the households displaced by the project. Preliminary research suggests that sufficient housing exists within an eight-mile radius of current household locations to meet all relocation needs. Please refer to Responses 16.16, 16.99, and 72.189 for a discussion of the availability of replacement housing.

30.49. The DEIR/SDEIS provides little more analysis or consideration of [displacement]...effects beyond its references to BART's obligations under the relocation laws.

**Response.** Please refer to Responses 30.45 and 30.46 for a discussion of BART's obligation regarding displacement.

### 31. ASSOCIATED GENERAL CONTRACTORS OF AMERICA, CALIFORNIA

31.1. The temporary inconvenience of construction is far outweighed by the benefits of a first class public transportation system into the SFO....The option which will maximize BART ridership the most is Alternative VI....

**Response.** The commentor's support for Alternative VI, in spite of significant construction-period impacts, is noted. For further details on the selection of the LPA, please refer to Response 2.7.

### 32. BELLE AIR ELEMENTARY SCHOOL PTA

32.1. Alternative VI is the best alternative for San Bruno. If our neighborhood must be disrupted, the bore-tunnel method in Alternative VI will hopefully be the least damaging to our neighborhood and the least stressful to our lives....Under any of the alternatives with a downtown station, Belle Air School could be closed altogether, from a displacement of up to 465 residents.

**Response.** The commentor's opposition to a retained cut alignment through San Bruno is noted. Please refer to Response 2.7 for a discussion of the selection of the Alternative VI Aerial Design Option as the LPA. As described in Response 17.68, the bored tunnel construction method through San Bruno was found to be infeasible due to a number of infeasible impacts.

### 33. BELLE AIR NEIGHBORS

33.1. We don't need two trains, CalTrain and BART, following the same route down the Peninsula. CalTrain is already continually improving the track and station sites. The taxpayers' money should not be spent on BART below the airport.

**Response.** The commentor's opposition to all of the build alternatives is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. As noted in Response 2.7, the Alternative VI Aerial Design Option was selected as the LPA by both boards. Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18.

- 33.2. The cost for each alternative has not been included in "Train to Plane", which is a disservice to us. Neither have any of the unmitigable impacts been listed, such as destruction of residences and businesses, disruption or elimination of schools and parks, destruction of drainage patterns and invasion of endangered species areas.

**Response.** The cost of each Alternative is listed in Table 2.3-1 of the Summary DEIR/SDEIS -- Estimated Capital Cost of BART-San Francisco Airport Extension--They are:

Proposed Project	\$1,046,370,000
I-380 Least-Cost Option	977,130,000
Alternative III--Base Case	920,442,000
Alternative IV--Airport Aerial East of US101	1,124,325,000
Alternative V--Minimum Length Subway to Millbrae	946,221,000
Alternative V-A--Minimum Length Subway to Airport GTC	1,195,893,000
Alternative V-B--Minimum Length Subway to San Bruno	847,215,000
Alternative VI--Millbrae Ave via Airport International Terminal	1,269,234,000

Alternative VI was adopted as the LPA by BART and SamTrans boards of Directors in late August, 1995.

Regarding unmitigable impacts cited by commentor:

1. Destruction of Residences and Businesses. Uniform Relocation Guidelines govern compensation to those affected by proposed construction.
2. Disruption or elimination of schools and parks. There is no elimination of schools. There are possible disruptions to schools which have been addressed throughout the document. Demolished parks will be mitigated by restoration or by off park site mitigation, i.e., replacement in kind.
3. Destruction of drainage patterns and endangered species area. The DEIR/SDEIS indicates these resources would be significantly affected, but that mitigation measures exist to reduce the effects to an insignificant level

33.3.

- [The LPA]...could be the preferred alternative for both Belle Aire and the rest of San Bruno if an important change were made. Use bored tunnel subway from Tanforan Station to south side of San Bruno Avenue...then at grade along the same route as the ALRS to an Airport Intermodal Station. This will avoid wetlands, endangered species, disruption of San Bruno parks and Belle Aire school.
- Proposed Project (LPA) Design Option...could be improved as shown above for LPA.
- Alternative III BART to Intermodal (Base Case)....The visual and noise impact of aerial alignment is unacceptable.
- Alternative IV BART Aerial East of Highway 101.... Eliminate I-380 Station...Eliminate Airport LTP Station...
- Alternative V Minimum Length Subway to Millbrae Intermodal-....Destroys more homes and businesses than any other alternative.
- Alternative V-A-....Destroys 3 times as many homes and twice as many businesses as present LPA.
- Alternative V-B-....Destroys same number of homes as V-A.

- This alternative, which is supported by some members of the San Bruno City Council, is too costly.

**Response.** The commentor's preferences for and concerns regarding the various alternatives are noted. This input was considered by the BART and SamTrans boards when they selected the Alternative VI Aerial Design Option as the new LPA at the close of the public review period. Please refer to Response 2.7 for further discussion of this process. A bored tunnel was considered by the boards to be infeasible for numerous reasons, as discussed in Response 17.68.

- 33.4. We wish to go on record as supporting Alternative VI, along with the San Bruno City Council, 5th Addition Neighborhood Association, and San Bruno Citizens Coalition. Our letter did not intend to submit an additional alternative for consideration. The intention was to call attention to a possible way to retain the advantages of Alternative VI, yet reduce the cost. We do have a concern resulting from the public comment meeting in Millbrae on March 4. The statement was made that a bored tunnel "or equivalent" should extend "to Angus"....To end the tunnel at Angus would severely impact the southern part of Belle Aire, the School, and Lion's Field.

**Response.** Your support for Alternative VI is acknowledged. The Alternative VI Aerial Design Option which is less costly than Alternative VI, has been selected as the new LPA (see Response 2.7). Under the Aerial Design Option, the alignment would be in subway through Angus Avenue between Georgia and San Felipe Avenue.

#### 34. BOYS & GIRLS CLUBS, NORTH SAN MATEO COUNTY

- 34.1. Construction of the rapid transit system will have significant impact on the Boys & Girls Club North San Mateo County. The impact includes but is not limited to: 201 West Orange Avenue location [which] is adjacent to proposed tracks. This site should be listed as a sensitive receptor.

**Response.** Although the Boy's & Girl's Club is located within 60 feet of the proposed construction easement, it has not been identified as a sensitive receptor from a visual perspective. A residence or a park is considered a sensitive receptor because the enjoyment of the physical setting by users of these land uses is readily affected by changes in the visual environment. Activities at the Club occur indoors and, unlike a residence with windows and both indoor and outdoor activities, feelings of encroachment are not expected.

- 34.2. [Construction will result in] loss of revenue while construction is in progress near the [201 West Orange Avenue] facility.

**Response.** There is no evidence indicating that construction will result in a loss of revenue at this facility.

As described in the last paragraph on page 3.2-47 of the DEIR/Technical Appendix, BART/SamTrans would address demonstrable loss of income to North San Mateo County Boys & Girls Clubs in accordance with state and federal relocation laws as applicable to non-profit organizations and public agencies.

- 34.3. [Construction will result in] rent for other facilities for use during construction (gymnasium time). We have 33 basketball teams that practice [at the 201 West Orange Avenue facility] and parking is required.

**Response.** If it becomes necessary to close or displace the Boys & Girls Club, BART/SamTrans would provide the club with all information, services and relocation payments that are required under state and federal relocation laws and regulations.

Operations and facilities at the North San Mateo County Boy & Girls Club will not suffer a loss of patron parking due to BART construction, as BART would coordinate temporary replacement parking with the business owner during construction. Permanent parking may be provided to the Boys & Girls Club over the parcel which was previously leased from SFWD or BART/SamTrans would address loss of parking to the Boys & Girls Club in accordance with federal and state relocation laws as applicable to non-profit organizations.

- 34.4. [Construction will result in] noise impact during construction [that] may call for closure of the administrative offices [of the 201 West Orange Avenue facility] and further reduce revenue. Cost for rental of office space, moving, etc.

**Response.** Construction noise limits (see DEIR/Technical Appendix pages 3.13-158 and -159) contained in BART design criteria would be applied to reduce off-site noise in the vicinity of the Boys & Girls Club. These limits should preclude the need for the office to be moved.

As described in the last paragraph on page 3.2-47 of the DEIR/Technical Appendix, BART/SamTrans would address demonstrable loss of income to the North San Mateo County Boys & Girls Club in accordance with state and federal relocation laws as applicable to non-profit organizations and public agencies.

- 34.5. The Boys & Girls Club [201 West Orange Avenue facility] will experience proximity impacts.

**Response.** Please refer to Response 34.1 for a discussion of encroachment impacts to the Boy's and Girl's Club.

- 34.6. [Construction will result in] parking lot damage and construction-related damage to [201 West Orange Avenue facility] facility.

**Response.** Any property damage resulting from project construction would be handled by project construction management personnel and construction insurance administrators. Typically, BART conducts a pre-construction and a post-construction survey to assess damage to property that may have occurred during construction. Any assessed damage would then be discussed with the property owners and a negotiated settlement would be reached.

- 34.7. Children's safety is a major concern. They will be both curious and explorative during construction [201 West Orange Avenue facility] and additional personnel will be required to prevent injuries.

**Response.** All construction sites in and around residential areas would be fenced and secured to prevent intruders and curious children from trespassing. Please refer to Response 21.10 for a discussion of safety near schools during construction.

- 34.8. Paradise Valley location. [Construction will result in] additional expansion to cover increase[d] use due to non-use of the 201 West Orange site.

**Response.** Please refer to Responses 34.3 and 34.6 for discussions on construction-related impacts to the Boys & Girls Club at 201 West Orange.

- 34.9. North Peninsula Family Alternative site. [Construction will result in] travel time for counselors due to road conditions.

**Response.** Construction under South Spruce Avenue is the only activity for any of the BART build alternatives that would increase travel time for counselors traveling on South Spruce Avenue, from north of the Boys and Girls Club at 1486 Huntington Avenue, who would encounter

construction activities at this location. The duration of the construction activities at South Spruce Avenue would vary depending on the alternative selected. The Base Case Alternative requires a grade separation bridge for South Spruce Avenue and would require the most time to complete construction. Under all of the BART build alternatives, South Spruce Avenue would remain open during construction although two of the four lanes may be closed while decking across the roadway is constructed after which those lanes would be reopened. The decking over the street in the construction area would take between two to four months depending upon the extent of utility relocation requirements. Under the Alternative VI, Aerial Design Option, the roadway surface of South Spruce Avenue would not be raised. This would minimize the time required to install decking. The delay to traffic during the decking operation would not be significant.

- 34.10. The Boys & Girls Club at 201 West Orange Avenue should be listed as a historical site having been the last Boys & Girls Club dedicated by President Herbert Hoover, July 26, 1961, and the only building in South San Francisco to have been dedicated by a President.

**Response.** While this site at 201 West Orange is no doubt significant in local history, it does not meet the prerequisite of being at least 50 years old for consideration for listing on the National Register.

### 35. BUILDING AND CONSTRUCTION TRADES COUNCIL OF SAN MATEO COUNTY

- 35.1. On behalf of the Building and Construction Trade Council of San Mateo County I am writing to express support of the extension of BART into San Mateo County.

**Response.** The commentor's general support for the BART extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. The Alternative VI Aerial Design Option was selected as the LPA by both boards in November 1995 (please refer to Response 2.7 for a discussion of the LPA selection process).

### 36. BURLINGAME BEAUTIFICATION COMMISSION

- 36.1. The Burlingame Beautification Commission is opposed to the removal of mature eucalyptus trees along the east side of the proposed BART car storage and emergency maintenance facility east of the railroad tracks in northernmost Burlingame....These healthy trees absorb sound and air pollution, provide a habitat for birds and wildlife, and serve as a screen and buffer between the industrial area east of the tracks, and the medical, professional, commercial and residential area west of the tracks. We take very seriously the preservation of mature healthy heritage trees throughout our City, and cannot approve the removal of this longstanding grove of trees.

**Response.** As many trees as possible on the east side of the alignment will be preserved. The DEIR/Technical Appendix acknowledges in Impact 19 on page 3.3-90, however, that it will be necessary to remove some trees. The trees on the west side would not be disturbed and would continue to provide wildlife habitat and a visual buffer between the industrial area east of the tracks and the medical, professional, commercial, and residential areas west of the tracks.

### 37. BURLINGAME CHAMBER OF COMMERCE

- 37.1. The Burlingame Chamber Board supports the concept of extending BART to the vicinity of SFO, and to improving public bus and rail transit to feed this new BART extension.

**Response.** The commentor's general support for the BART extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. The Alternative VI Aerial Design Option was

selected as the LPA by both boards (see Response 2.7 for a discussion of the LPA selection process).

- 37.2. The station and carpark proposed by BART in Alternative VI is too big, brutally overscaled and poorly laid out.

**Response.** The DEIR/Technical Appendix on page 3.3-89 acknowledges that the Millbrae Avenue Station would have significant unavoidable scale incompatibility impacts. The station plans in the DEIR/Technical Appendix are schematic and intended to indicate the general disposition of station features. The final design of the Millbrae Avenue Station will be the result of direct and significant community and agency involvement. Initial discussions have already resulted in modifications to the station layout to improve circulation, streetscape, and future possible joint development opportunities. The design of the Millbrae Avenue Station was revised in the FRDEIR/S#2DEIS for Alternative VI and the Aerial Design Option LPA. These changes to the design concept for the Millbrae Avenue Station and the changes requested by the City of Millbrae are discussed in Response 16.100.

The number of parking spaces required to meet the forecasted parking demand at the Millbrae Avenue Station under Alternative VI and the Aerial Design Option LPA were derived from the MTC traffic model and refined by employing a sub-area traffic model of central and northern San Mateo County developed for this study. This model used MTC regional BART patronage projections to derive the number of persons driving to each existing and future BART station. The parking demand will be highest in 2010 compared to 1998 and 2000, therefore the impact analysis and required mitigation measures were performed for 2010 when the adverse effects from parking demand would be greatest.

In addition, please refer to Response 16.76 for discussion of the design refinements to the Millbrae Station evaluated in the FRDEIR/S#2DEIS.

- 37.3. Proper auto and pedestrian circulation paths, greenery, and sensitive building and parking garage massing and placement must be considered and has not been. It can be done right and can improve what is now a horrible series of intersections and half-used sites.

**Response.** Traffic and pedestrian circulation for each BART station under every alternative have been carefully considered. Specific pedestrian circulation internal to every station will receive additional attention as part of final design. Specific landscaping and architecture features will not be chosen until final design and a process for receiving community suggestions on these features will be included. Where appropriate, mitigation has been proposed to address parking garage massing and enhance streetscapes near BART stations, specifically in San Bruno under Alternatives IV and V.

BART is proposing to modify the Millbrae Avenue Station design under Alternative VI to incorporate several of the proposals in the City of Millbrae's concept plan. A station plaza would enhance the visual quality of the station as seen from El Camino Real and Millbrae Avenue. The four-story parking structure would be set back from Millbrae Avenue under the revised design. This structure would have the same massing as the original concept; so that scale incompatibility would still be significant and unavoidable.

- 37.4. The tailtracks in our estimation are easily hidden or bunkered, and can be made no worse than what exists today at relatively small cost. Again, it depends on how it is done and we will insist on strong local design input and control, and review of all details.

**Response.** Please refer to Response 14.47 for a discussion of the tailtracks in Burlingame.

- 37.5. If Alternative VI is the decision, we ask for a serious creative study of the interchange entries and exits at Millbrae Avenue and into and out of the car park and development sites to minimize this impact on Burlingame and Millbrae. Other actions for the arterials should be studied to mitigate this as much as possible, and we must have a strong voice in what is done.

**Response.** The design of the Millbrae Avenue Station was revised in the FRDEIR/S#2DEIS for Alternative VI and the Alternative VI Aerial Design Option. These changes to the design concept for the Millbrae Avenue Station and the changes requested by the City of Millbrae are addressed in the response to comment 16.35.

The number of parking spaces required to meet the forecasted parking demand at the Millbrae Avenue Station under Alternative VI and the Alternative VI Aerial Design Option were derived from the MTC traffic model and refined by employing a sub-area traffic model of central and northern San Mateo County developed for this study. This model used MTC regional BART patronage projections to derive the number of persons driving to each existing and future BART station. The parking demand will be highest in 2010 compared to 1998 and 2000, therefore the impact analysis and required mitigation measures were performed for 2010 when the adverse effects from parking demand would be greatest.

Please refer to Response 6.6 for a discussion of traffic impacts at El Camino Real/Millbrae. Please refer to Response 10.15 for a discussion of traffic impacts at the Millbrae Avenue and Rollins Road intersection. Please refer to Response 10.17 for a discussion of the Millbrae Avenue Interchange to Highway 101. Consultation with representatives of the City of Millbrae has occurred and will continue to occur concerning traffic and other impacts.

- 37.6. The economic impacts of BART therefore are of greatest concern, and the extension must guarantee that other systems are not bankrupted to pay for this one piece. Very little convincing information exists on the financial feasibility, impacts and financing alternatives, and much more study is required.

**Response.** Please refer to Response 14.93 for a discussion of the financial plan included in the DEIR/SDEIS, and Response 14.95 for a discussion of the roles of SamTrans and CalTrain in the BART-San Francisco Airport Extension.

## 38. BURLINGAME HOMEOWNERS ASSOCIATION

- 38.1. Regarding BART's Alternative VI, which places a "tailtrack" into Burlingame, I see no benefit to my community and some serious negative ones including: 1. Increased traffic congestion...2. As the most costly of the alternatives, the funding for Alternative VI poses the greatest economic threat to the future of SamTrans...[and] 3. BART's expansion also poses a threat to the future of our existing rail-transit system....Let's support the TSM.

**Response.** The commentator's concerns regarding Alternative VI and preference for the TSM Alternative are noted. This input was considered by the BART and SamTrans boards when they selected the Alternative VI Aerial Design Option as the new LPA at the close of the public review period. Please refer to Response 2.7 for further discussion of this process. The impacts of Alternative VI on traffic congestion in Burlingame are addressed in Responses 14.27, 14.28, 14.30 through 14.36, and 14.39 through 14.41.

- 38.2. [The DEIR/SDEIS] shows neighborhood maps of South San Francisco (Figure, 7-3), Colma (Figure 7-2), Millbrae (Figure, 7-5), San Bruno (Figure, 7-4), but nothing for Burlingame which will be detrimentally affected by the BART project.

**Response.** In the case of Colma, South San Francisco, San Bruno, and Millbrae, the BART extension traverses the entire length of the community and affects a number of neighborhoods and

planning areas. Since these areas are mentioned often throughout the document, it was important to depict them so that readers would have an idea of their location. In the case of Burlingame, only under Alternative VI would the BART extension traverse Burlingame's jurisdictional boundaries. The extension extends 1500 feet into Burlingame and does not run along any residential neighborhoods. For these reasons, a residential neighborhood/district map was not prepared for Burlingame. Impacts of Alternative VI on residential neighborhoods in Burlingame are addressed in the DEIR/Technical Appendix in Section 3.2, Land Use and Economic Activity (page 3.2-55); Section 3.3, Visual Quality (page 3.3-90); Section 3.9, Noise and Vibration (page 3.9-85); and Section 3.13, Construction (pages 3.13-84 and 3.13-196).

- 38.3. The BART project, should it go any farther south than the airport, will hurt more than just the cited garter snake. It will impact Police, Ambulance and Fire response time....It will massively affect street erosion costs, pollution increases accompanying more traffic, fumes, noise - and it will be aesthetically barren.

**Response.** The commentor's opposition to extending BART south of the SFIA due to the impacts stated is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. The Alternative VI Aerial Design Option was selected as the LPA by both boards (see Response 2.7 for a discussion of the LPA selection process). The impacts of the new LPA are discussed in the DEIR/Technical Appendix and the FRDEIR/S#2DEIS.

- 38.4. An upgraded electrified CalTrain system can do the job better.

**Response.** This input was considered by the BART and SamTrans boards when they selected the Alternative VI Aerial Design Option as the new LPA at the close of the public review period. Please refer to Response 2.7 for further discussion of this process.

## 39. CITY HALL WATCH

- 39.1. We are opposed to extending BART beyond the City of Colma...

**Response.** The commentor's opposition to extending BART south of Colma is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the Aerial Design Option LPA in November 1995. As noted in Response 2.7, the Alternative VI Aerial Design Option was selected as the LPA by both boards. Background studies demonstrating the need for a rail project south of Colma are discussed in Response 79.18.

- 39.2. We favor the realignment of CalTrain at South San Francisco so that it runs on the east side of 101...to a station at United Airlines Maintenance Center thence to another station at SFO and on to reconnect with the existing CalTrain tracks at Millbrae. Such a plan would mitigate the problems associated with BART running through our city.

**Response.** Your support for the CalBART proposal is noted. Please refer to Response 13.4 for a discussion of the CalBART proposal.

#### 40. COALITION OF COLMA CEMETERIES

40.1. Our biggest concern is that page 4.28 simply lists three of our major concerns... as "Areas of Controversy": Disruption of cemetery services; Visual and physical impacts to cemeteries and loss of landscaping with any profile other than subway. [and] Extent and duration of construction activities because of disturbances to local circulation, noise, dust and pedestrian safety. We do not consider these as areas of controversy. As you know both we and the City of Colma have insisted since the beginning of this process that these problems be fully mitigated, with mitigations agreed upon before the project moves forward any further.

**Response.** CEQA requires an EIR to identify "areas of controversy" known to the project sponsor, including issues raised by the agencies and the public. As these issues have been identified by the public as concerns, they were incorporated into this section. This section is not intended to be exhaustive but to highlight critical areas that have arisen and must be addressed. Please refer to Response 107.172 for further discussion of this CEQA provision.

40.2. There is no real detail concerning mitigation of potential impacts on wells, water lines, electrical power and other underground utilities within the right-of-way.

**Response.** Please refer to Responses 19.122, 41.29, 66.53 and 66.83 for a discussion of utility impacts.

40.3. There is no mention of potential impacts on the wells that serve Olivet Cemetery, Eternal Home Cemetery and Cypress Lawn Cemetery.

**Response.** The wells that serve Olivet, Cypress Lawn and Eternal Home Cemeteries will not be displaced by BART construction. The aquifer layer that the wells draw from is well below the elevation of BART tunnel construction, therefore, no disruption to their ability to continue to be productive wells is anticipated. Also, in the Summary DEIR/SDEIS on page 3.8-14, the last sentence in the paragraph on "Wells" is removed.

40.4. The new well at Italian Cemetery (added to the Stuber/Stohe Report). This well was completed in June 1994 and is located approximately 40 feet east from the edge of the property. This well is 560 feet deep and has a 40 H.P. pump that yields 275 C.P.M. pumping level is at about 360 feet. This well must be monitored for vibration and corrosion.

**Response.** Criteria for construction noise and vibration limits and measurement of construction noise and vibration as contained in BART's System Design Criteria will be included in construction contract documents as they are developed in the engineering phase of the project. Where there are local agency noise criteria that are more restrictive, these criteria will be adopted by BART. The contractor will be required to prepare and implement a construction noise control program. This program will include monitoring of noise and vibration levels by a qualified, independent consultant to ensure compliance with established noise and vibration criteria.

With respect to corrosion, all BART facilities will be designed to be fully insulated to minimize corrosion. The presence of BART facilities is not expected to affect the Italian Cemetery well.

40.5. The resolution (closing) of the open area between the Italian Cemetery and Eternal Home, purportedly a temporary ventilation area [was not addressed].

**Response.** The existing subway concrete box would be extended throughout the cemetery area and covered at the completion of subway box construction. The ground over the box would be landscaped similarly to the surrounding grounds. Eucalyptus, a non-native species, may be replaced with trees whose height, weight, and root system will not have adverse effects on the subway structure. BART would provide landscaping which would be consistent with plant types prevalent in the area. Existing tall trees, mainly imported eucalyptus, however, would be replaced with other tree types whose height, weight and root system would not have an adverse effect on BART's subway structure. Also, BART would require evergreens and other, low height growth to minimize maintenance costs.

- 40.6. Careful coordination of construction and burial schedules [was not addressed].

**Response.** Please refer to page 3.13-53 of the DEIR/Technical Appendix for a discussion of the need for BART to work closely with the cemeteries to minimize impacts during construction.

- 40.7. El Camino and Hillside ingress and egress changes, blockages, time frames and alternatives [were not addressed].

**Response.** The access impacts to the cemeteries in Colma during construction of the proposed BART extension are addressed in Impact 1, on page 3.13-27 of the DEIR/Technical Appendix. Access to these cemeteries would be available from Hillside Boulevard while work is performed on the driveway access from El Camino Real. The cemetery driveways in the BART alignment would have decks constructed over the BART alignment during construction activity. These decks would provide access to the cemetery property. These decks would be constructed in a manner that would remove one lane at a time to allow access in the other lane with flaggers to direct traffic flow. The construction of such a deck over a cemetery driveway would take approximately one month, depending upon the utilities located underneath the driveway. Two exceptions to this scenario are the one-lane driveways at Salem Memorial Cemetery and Olivet Parkway. The one-lane driveway at Salem Memorial would be closed for one month. A temporary bypass route around the construction activity could be constructed with the property owner's permission. The profile of Olivet Parkway requires that it be closed for approximately four months during construction activity.

- 40.8. We would expect that trees, etc. removed from the area would be replaced after agreement is reached between Cemeteries and BART/SamTrans with reference to landscaping appropriate to the climate and location at the Colma cemeteries.

**Response.** There will be coordination with the cemeteries to determine appropriate landscaping. Please refer to Response 29.18 for a discussion of Mitigation Measure 2.1.

- 40.9. We do not consider 15 gallon trees as suitable replacements for grown trees. The least we could accept would be 36" box trees.

**Response.** The recommended landscaping plan for replacement of well-established vegetation is to plant a mixture of 15-gallon, 24-gallon, and 36-inch box trees of a particular specimen. Specific sizes of replacement trees will be selected by BART for review by the individual property owners. This planting plan will provide for optimized growth cycles to compensate for the vegetation that has been removed for construction purposes. Please refer to Response 29.18 for a description of the vegetation replacement mitigation.

40.10. It is our understanding that you are in possession of the Stuber/Stroeh Report, "Coalition of Colma Cemeteries-Impact on Existing Facilities" dated February 24, 1992....We understand that these impacts and their mitigation will be addressed in your planning process and that resolution of these impacts will occur in advance of construction and will be addressed fully in utility and Geo. Technical reports connected to preliminary engineering documents.

**Response.** All significant environmental impacts concerning the cemetery properties are identified in the DEIR/Technical Appendix and appropriate mitigation measures are proposed. During the final engineering design, these impacts and proposed mitigations will be refined in geotechnical, utility, and other reports. Please refer to Response 40.1 for a detailed description of mitigation measures for cemetery properties.

40.11. I wish to affirm that the history and the historical assets of our cemeteries as documented in the Historical Resources Evaluation Report-Supplement to the EIR demand a below grade, closed system.

**Response.** The Historical Resources and Evaluation Report is a technical appendix to the DEIR/Technical Appendix. Under all BART build alternatives except the Base Case, BART is in a below-grade or covered subway alignment adjacent to the cemeteries in Colma. Under the Base Case, BART would be in open retained cut. Cultural and historic environmental impacts of the proposed BART extension on the cemeteries in Colma are fully documented in the DEIR/Technical Appendix. As described on page 3.4-22, Cultural Resources, of the DEIR/Technical Appendix, the retained cut Base Case alignment would adversely affect the cemetery properties that are potentially eligible for nomination to the National Register of Historic Places by altering the visual and audible surroundings. Under the Base Case, as described on page 3.4-23 of the DEIR/Technical Appendix, proposed mitigation measures would reduce noise impacts to a less than significant level while visual alteration to the physical setting of the cemeteries would remain significant and unavoidable. The BART and SamTrans boards of Directors could adopt either a subway alignment, as in the Aerial Design Option LPA or a retained cut alignment adjacent to the cemeteries under Alternative III. If the retained cut alignment adjacent to the cemeteries is adopted as a project, the BART and SamTrans boards of Directors would need to make a finding of overriding considerations under CEQA.

40.12. We submitted in 1992 and submit again the Stuber/Stroeh report commissioned by us to record the potential impacts of the BART project. It is most important that this report be included in your engineering deliberations and that the impacts noted in it are properly mitigated. Among the impacts noted are structural concerns for our buildings and wells, and replacement of gas, electrical and water lines.

**Response.** Please refer to Response 40.10 for a discussion of geotechnical and utility impact and Response 40.1 for how BART will address proposed mitigation measures for cemetery properties.

40.13. We are also extremely concerned about coordinating burials and construction.

**Response.** Access to cemeteries will be maintained at all times. During construction of the temporary decking at cemetery entrances, at least one lane will be available for one way traffic in or out, while the decking is being installed (or removed at the end of work at that site). Construction will be coordinated with each cemetery manager so that noise from construction activity is abated during burial services in close proximity to the work site.

BART/SamTrans are very aware and sensitive to disruption of cemetery activities during the construction period. Impact 1 under Construction/Land Use (please refer to page 3.13-53 of the DEIR/Technical Appendix) acknowledges this temporary disturbance as a significant impact. The proposed mitigation includes early consultation with the cemeteries and the Coalition to identify specific actions to minimize construction impacts.

- 40.14. We must also maintain entrances and exits for our [Cypress Lawn Cemetery Association] families, our vehicles and our staffs.

**Response.** Please refer to the Responses 40.7 and 40.13 for a discussion of maintaining access on cemetery driveways during construction. Construction activities on the BART extension would not significantly impact access and egress to the Cypress Lawn Cemeteries. To the extent possible, construction trucks would use the BART right-of-way to access the construction sites. Use of El Camino Real and Hillside Avenue as a truck route during construction activities would need to be approved by the local cities.

#### 41. COUNTY COUNCIL, LEAGUES OF WOMEN VOTERS OF SAN MATEO COUNTY

- 41.1. Many of the proposed mitigation measures are vague in terms of results or depend on action by agencies other than BART, with no apparent provision for ongoing support by BART for the financial cost to provide services necessitated by the project.

**Response.** The DEIR/SDEIS proposes mitigation measures for significant environmental effects that BART considers feasible. In some circumstances, a mitigation measure is within the responsibility and jurisdiction of another public agency. Please also refer to Response 16.111 for a discussion of costs borne by other agencies.

- 41.2. The uncertainty of needed funding resources as well as the already calculated financial effects on the existing SamTrans and CalTrain systems could put all three agencies in financial jeopardy.

**Response.** Please refer to Response 14.93 for a discussion of the financial plan included in the DEIR/SDEIS, and Response 14.94 for a discussion of the roles of SamTrans and CalTrain in the project.

- 41.3. The only feasible mitigation for the traffic generated by the end-of-line station (regardless of which station site) is a true intermodal connection so that passengers and employees arriving from south of the airport are able to travel by CalTrain and make a single transfer to access either the ALRS or BART for travel north. An airport station that benefits primarily San Francisco and East Bay passengers and employees ignores over half of the potential market that could result from a true intermodal connection.

**Response.** Intermodal connections between BART and CalTrain, BART and SamTrans, as well as BART and the proposed ALRS are included in every BART build alternative. CalTrain riders south of the SFIA would be able to make a single transfer to BART or to the ALRS with one transfer except under the Alternative VI LPA and the Aerial Design Option LPA. Please refer to Response 66.111 for a discussion of the double transfer required for some CalTrain patrons under Alternative VI. MTC's mode choice model determined the access mode to each BART station.

- 41.4. This DEIS/DEIR is inadequate because it does not take into account the Metropolitan Transportation Commission (MTC) Resolution 1876, which provides for CalTrain extension into downtown San Francisco as well as BART extension....While BART may not want to present

information showing relative advantages to CalTrain, a mode shift could reduce the costs of the BART/SFO extension project by reducing the need for such large stations and parking facilities, reducing capital costs as well as reducing costs for takings and mitigations for impacts on low income neighborhoods.

**Response.** Please refer to Response 11.6 for a discussion of the CalTrain downtown extension. Please also refer to Response 41.7 for a discussion of parking demands at the end-of-line station with and without the CalTrain downtown extension. If the CalTrain downtown extension project was either environmentally cleared or occurring simultaneously with the BART extension, the design (and resulting capital costs) of the BART extension might be affected. However, the status of the proposed CalTrain downtown extension is unclear and designers of the BART–San Francisco Airport Extension must proceed with the best information available.

Since the CalTrain project was without sponsorship or a preliminary funding plan at the time the BART extension environmental work was undertaken, a decision was made by BART, SamTrans, and the FTA to study the BART extension without the CalTrain extension to downtown San Francisco. Such a study would provide data on the maximum environmental impacts and required mitigation measures associated with the BART extension. The scale of stations, parking garages, and other elements of the project were defined as if the CalTrain extension were not in place. A series of decisions in 1996 will determine whether one, both, or neither project is undertaken.

- 41.5. It is essential to provide a true intermodal station to connect BART, CalTrain, and the ALRS....Alternative VI fails to provide the necessary connection.

**Response.** The commentor's preference for an intermodal station is noted. The Millbrae Avenue Station under Alternative VI provides a connection between BART, CalTrain, and SamTrans. An ALRS would not be required under this alternative because BART would go directly to the SFIA.

- 41.6. A calculation, then, of the FTA Cost Effectiveness Index (CEI) could be expected [with a CalTrain downtown extension] to show less favorable results for the remaining BUILD alternatives than are calculated in Table 6-10.

**Response.** It is unclear whether the commentor is suggesting that CalTrain ridership should be dealt with in the BART CEI calculation, or if the CalTrain extension to downtown (including its capital and operating costs and time savings) should be included in a calculation of a combined-project CEI. The calculation of the CEI for the BART–San Francisco Airport Extension is correct as shown in Table 6-10. The commentor appears to believe that reducing the number of potential BART riders by the number that would take CalTrain to downtown San Francisco would increase the CEI of the project (e.g., show the project as less cost effective). However, this transfer of patrons would not affect the CEI calculation because the Cost Effectiveness Index uses new *transit* riders as the denominator for the calculation of costs per rider. Therefore, a new CalTrain rider would be indistinguishable from a new BART rider, and would be indistinguishable from a new rider who transfers between CalTrain and BART.

These new transit riders are measured by analyzing regional transit person trips, or linked trips, which factors out transfers between transit trips. Any person that uses transit in making that trip is counted as one regional transit person trip, no matter how many transfers were made between transit systems. More of these linked transit trips would be made with a BART build alternative than under the TSM Alternative with the CalTrain downtown extension. Please refer to Response 54.4 for further discussion of regional transit person trips under the TSM Alternative compared to the Base Case Alternative with and without the CalTrain downtown extension. For a more general

discussion of the impact on transit boardings with the CalTrain downtown extension, please refer to Response 11.6.

Alternatively, the commentor may be suggesting that the CalTrain downtown extension should be included in a calculation of a combined project CEI. Such an estimate is not possible due to the lack of ridership, capital, and operating cost figures for the CalTrain extension. Please refer also to Response 14.92.

- 41.7. Since one of the worst unmitigated impacts of Alternative VI is the traffic congestion on the 101 Freeway, local streets, and intersections because of the need to park at Millbrae Avenue end-of-line station, the most appropriate mitigation would be to build the CalTrain extension, based on the results of the 1992 study. Financial savings could also result for BART, because it could build a smaller parking garage at Millbrae Avenue and could also reduce station capacity incrementally.

**Response.** Please refer to Responses 11.6 and 41.4 for a discussion of the proposed CalTrain downtown extension. According to the AA/DEIS/DEIR published by MTC in 1992, traffic volume on Highway 101 between the Broadway and Millbrae Avenue segment would decrease by approximately 370 vehicles in the northbound direction during the A.M. peak hour in 2010, when comparing the Base Case Alternative with the CalTrain downtown extension to the Base Case Alternative without the downtown extension. The level of service on this freeway segment was estimated to be LOS F in both scenarios. According to the same environmental document, parking demand at the end-of-line BART station would decline significantly with the CalTrain downtown extension. Parking demand at the external Airport Intermodal Station under the Base Case Alternative and the LPA declines from 2,310 vehicles without the downtown extension to 1,460 vehicles with the downtown extension.

BART has never been opposed to CalTrain operations or the proposed CalTrain extension to downtown San Francisco; on the contrary, the two systems are complementary. Reducing the size of the parking garage at the Millbrae Avenue Intermodal Station by 850 (2,310 less 1,460) would not result in a significant reduction in cost, and since 1,460 is not believed to be an adequate number of spaces, increased congestion would be expected around the insufficiently sized garage. Please also refer to Response 22.1.

- 41.8. The impacts of traffic generated by the project are incompletely discussed (pages S-22, Table S-6), because the effects on LOS have been defined for only freeways and intersections most immediately adjacent to specific traffic generating features of the project. LOS on arterial streets should be measured (base line and projections) in order to evaluate the effect on the county's Congestion Management Plan listed arterials and intersections and so that the cities may estimate the effects on city police, fire, and emergency services, parking, etc. These impacts on local streets and neighborhoods are significant and must be adequately mitigated.

**Response.** Intersections are the bottlenecks to traffic capacity rather than the operation of the mainline segments of local roadways. Impacts on traffic congestion within local communities are measured by calculating the level of service at specific intersections. If traffic volumes are being added to a specific roadway segment, then mainline operations were considered. Within the study area, all intersections on major arterials that are monitored as part of the on-going San Mateo County Congestion Management Plan were included in the DEIR/SDEIS analysis. Specific impacts to community services, such as city police, fire, and emergency services are discussed in Section 3.5, Community Services and Facilities.

- 41.9. (Page 3.1-24 [of the Summary DEIR/SDEIS]) Traffic congestion on El Camino Real and intersection LOS near Millbrae Avenue are discussed, but areas similarly impacted in alternatives

other than VI are only briefly mentioned, implying that Alternative VI is likely to be the LPA selected. Since it is possible to combine studied features of the several alternatives in order to create the LPA, every feature of every alternative should be treated in the same way in the DEIR/DEIS. Mitigations will not be effective if they are developed only for intersections and do not provide for improvements on feeder streets.

**Response.** All traffic impacts are covered in equal depth, particularly in the DEIR/Technical Appendix, which includes traffic analysis by alternative, and in Chapter 3.1, Transportation, of the Summary DEIR/SDEIS. In certain cases, more depth is provided for the Locally Preferred Alternative; if other alternatives resulted in the same impacts, the impact analysis was not repeated. This abbreviation was intended to shorten the document. Without specific page references, BART staff is unable to be more specific.

- 41.10. (page 3.2-25 [of the Summary DEIR/SDEIS]) The creation of 300-500 permanent employment positions with transit systems, or 675-1125 direct and indirect permanent positions in the Bay Area are predicted. While these new jobs may add dollars to the local economy, nothing is said about the effects of accommodating the needs of those additional persons and their families who may choose to live in the project area. Those increased impacts of congestion, VMT, and need for housing and municipal services must be recognized as negative impacts and mitigated appropriately.

**Response.** While living in proximity to employment centers is desirable in terms of commute patterns, there are many factors that dictate locational decisions, including price of housing, quality of schools, proximity to spouse's job, proximity to family members, etc. Thus, it is not possible to determine whether any new employees will reside in the project area. The Bay Area is a large and dynamic region, and households move in, out, and within the area on a constant basis. Likewise, people change jobs, so there is not a direct correlation between specific new jobs and housing demand or need for municipal services. If any households do move into the project area, they will pay taxes directly and indirectly through purchases (sales tax) that will provide revenues to local government.

- 41.11. Local economic activity may result from station area activity, but the DEIR says there are not yet any specific plans for station site development; therefore, economic benefit is uncertain. However, all BUILD alternatives cause displacement of businesses and employees. The outcome of this displacement is uncertain, but may be presumed to result in some amount of job loss, a significant negative impact. Mitigation Measure 1, [compliance with acquisition and law.] page 3.2-19, will be insufficient if business relocation results in job loss.

**Response.** Although the outcome of any particular relocation is uncertain, it is not appropriate to presume that the displacement and relocation process will result in some amount of job loss. Page 3.2-57 of the DEIR/Technical Appendix details the relocation procedures and payments that will be made pursuant to the Uniform Relocation Act. At present, there is a substantial industrial and retail vacancy rate in the project corridor, and it should be possible to relocate any business that desires to relocate.

- 41.12. The disruption to community cohesion, mobility, social interaction, and visual connections, as well as loss of schools and parks, will result in significant, unavoidable impacts which cannot be mitigated. Because these impacts conflict with local land use plans, the effects of the proposed project have not been adequately controlled.

**Response.** Each of these areas has been discussed (refer to pages 3.2-85 through 3.2-102, Neighborhood Impact Assessment) in the DEIR/Technical Appendix. Several impacts are

described as unavoidable, which means they cannot be "controlled" (avoided or reduced to a level of insignificance).

- 41.13. The DEIR/DEIS is vague with respect to availability of replacement housing for low income needs. The FEIR/EIS must provide documentation of housing vacancies in the project area according to location and cost of rental or purchase.

**Response.** Please refer to Response 16.99 regarding replacement housing. The documentation is provided in a Final Relocation Plan and included in Volume V, Technical Appendices of this FEIR/FEIS, which provided specific information on how the residential relocation will occur.

- 41.14. A supplemental mitigation measure would be for BART to permanently employ community relations experts, ombudsmen, or other personnel to work on behalf of residents who suffer displacement, social, and economic impacts due to the project. BART should also employ persons to work with the cities in the project area to assure ongoing cooperative support of city services negatively impacted by BART construction and operation. Both mechanisms have worked well on BART's other extension projects.

**Response.** As discussed in the construction section of the DEIR/Technical Appendix on page 3.13-54, BART has a comprehensive community relations program and will work closely with the affected communities to minimize construction impacts. BART/SamTrans will also be responsible for providing relocation services and will coordinate the entire process with local governments.

- 41.15. The DEIR states that BART would be unable to provide any assistance to compensate for the increased demand for emergency or other services demanded by BART. Other jurisdictions have been able to work out some kind of Joint Powers Agreement for mutual assistance, beneficial to all parties. BART must be able to reciprocate if it expects emergency assistance.

**Response.** BART police follow the assistance procedures mandated by the California Mutual Aid Agreement (CMAA), as described in Section 3.5, Community Services and Facilities, of the DEIR/Technical Appendix. This agreement is signed by BART and all local jurisdictions served by BART. The CMAA is an existing protocol whereby the local jurisdictions and BART agree to provide mutual police services should the need arise. The CMAA occurs on both regional and local levels. CMAA responses to site-specific crimes such as auto theft and burglary are handled informally by the particular local police jurisdiction and BART police on a case-by-case basis. Emergency response to regional situations such as riots would be coordinated by the particular county's Office of Emergency Services (Sgt. Joe, 1994).

- 41.16. Location of the car wash structure significantly increases the demand on water and waste facilities, but would impact different cities differently (Table 3.5-3 [of the Summary DEIR/SDEIS]). Does BART have any means to adjust its outflows for seasonal variations in municipal systems in order to prevent overload?

**Response.** The DEIR/Technical Appendix section on Community Services and Facilities, pages 3.5-14 and 3.5-28, identifies that the volume of wastewater represents a negligible percentage of available wastewater treatment and finds the impact insignificant. The car wash facility would consume 700 gallons per day on average. This volume would not result in significant wastewater demands on any of the affected jurisdictions.

- 41.17. Wastewater treatment capacity for combined flows is also uncertain for the Colma/San Bruno/South San Francisco treatment plant, and is considered a potentially significant impact, for which BART, again, provides no mitigation. Impact would be greatest for the LPA, I-380, Base Case Alternatives. Water supply capacity will be exceeded for San Bruno with the addition of BART needs. No mitigation is provided; San Bruno is expected to renegotiate its allocation with the San Francisco Water Department or discover other sources!

**Response.** As noted by the commentor, the DEIR/SDEIS identifies potential cumulative impacts to certain community services. BART by itself does not impose significant demands on local water and wastewater services (refer to project-specific analysis in Section 3.5, Community Services and Facilities). It is only under the cumulative conditions that potentially significant effects may occur, and these effects are largely the result of projected growth in the local jurisdictions, rather than as a result of BART.

- 41.18. The DEIR/[SDEIS] concludes that "hydrostatic uplift forces would not result in significant structural or safety impacts." (Page 3.6-12) However, the incremental costs attributed to a below-grade structure for the segments mentioned as problem areas for the several alternatives are not mentioned.

**Response.** As described in the DEIR/Technical Appendix on page 3.6-18, below-ground structures constructed below the groundwater level may be subject to hydrostatic uplift forces. The structures designed for this project have been designed to withstand impacts from hydrostatic uplift in accordance with BART design criteria 9.3.6, and these forces will not result in significant structural or safety impacts. Costs associated with designing and constructing the below-grade structures to withstand hydrostatic uplift are included in the conceptual project costs discussed in Chapter 6 and shown in Table 6-1.

- 41.19. (Page 3.7-11 [of the Summary DEIR/SDEIS]) Mitigation Measure 1. Avoidance of Wetlands, "In...Design Option V-A, ventilation building will be moved...100-150 feet south, and, track alignment will be moved 50-100 feet north, (both) to avoid displacement of high-quality seasonal wetlands." Comment: It is not clear whether these measures will reduce the amount of habitat or wetland loss shown in Table S-4, page S-19. The net effect of these measures should be shown.

**Response.** The purpose of moving the facilities noted in this impact is to avoid the identified impact. If the wetlands are avoided, then the impacts would be "reduced." The impacts presented in Table S-4 are related to the project alternatives proposed at the time the impact analysis was conducted and represent a conservative scenario for Design Option V-A. With the avoidance of the identified wetlands, the net loss of wetlands for this alternative would range from 0.86-0.87 acres. Thus, Design Option V-A would result in the same level of impact as Alternative VI, and result in lesser impacts than Alternative V and Design Option V-B.

- 41.20. (Page 3.7-11 and 3.7-12 [of the Summary DEIR/SDEIS]) Mitigation Measure 2. Creation of Creekside and/or Wetland Habitats of Equal Wildlife Habitat Values. West-of-Bayshore Parcel....The proposed mitigation is very uncertain in its outcome. There is no indication of what the SFIA attitude is toward converting some of its upland acreage to wetlands, or if suitable off-site land could be found. This is too uncertain and vague. Furthermore, there is no assurance that the created wetlands will support the affected species.

**Response.** Discussions with the U.S. Fish and Wildlife Service (USFWS) have indicated that creation of wetlands from upland habitat may not be preferable mitigation for the SFGS because upland areas are an equally important feature of the habitat, and wetland creation could prove to be

disruptive to the SFGS. BART and the SFIA have negotiated and agreed (in concept) upon other mitigation measures for enhancing the habitat on the west of Bayshore parcel.

During development of the draft environmental documents, optional mitigation sites for habitat and wetland development/enhancement were investigated and were found feasible. However, few properties exist for suitable development of SFGS wetlands habitat, and the most successful wetland habitat development would need to be adjacent to an existing population of SFGS. The draft document identifies this limitation and indicates replacement of habitat wetlands at a 3:1 ratio as feasible. The Biological Opinion prepared by USFWS is included in Volume V of this FEIR/FEIS, as is a preliminary agreement between that agency and BART. These documents, as well as Volume I, identify a parcel of land west of the CalTrain tracks in the area of Santa Helena and Huntington Streets as a suitable wetland site. BART will continue to work with the USFWS to identify any other offsite locations that may be suitable wetland habitats for the SFGS and California red-legged frog. Commitments to wetland replacement (for both SFGS habitat and non-SFGS habitat wetlands) are also provided in the Section 404 permit application and Mitigation Plan presented in Volume V of this FEIR/FEIS.

In addition to onsite development of wetlands, there are offsite properties which have been identified as suitable for enhancement of existing SFGS habitat. One which could be available is located in the southwestern portion of San Mateo County (Steel Ranch).

41.21. (Page 3.7-15 [of the Summary DEIR/SDEIS]) Mitigation Measure 2 continued....The purpose of the mitigation is to restore habitat for the garter snake, frog, and damselfly, nonplant species, in addition to plant habitat. The success criteria does not include a measurement of the success of the nonplant species' survival or growth in the created wetlands. If the created wetlands are unsuccessful, the project will have already have been built, and habitat lost.

**Response.** Success criteria for the SFGS and other wildlife species for any habitat creation mitigation measure would be developed in consultation with the USFWS. Please refer also to Response 41.20 for a discussion of wetland mitigation.

41.22. (Page 3.7-17 [of the Summary DEIR/SDEIS]) Mitigation Measure 4. Oil and Water Separators in Stormwater Catch Basins....This is a good mitigation measure, but avoidance of water pollution doesn't just involve removing oil from runoff. Many pollutants are carried in mud, dust, and some are dissolved. There should be a public education program to educate parking lot patrons in proper car maintenance to avoid leaking antifreeze and oil, and monitoring programs should be carried out to put flyers on offending vehicles, or some other mechanism to discourage leakers. Parking lots should also be regularly swept to collect dust and prevent pollutants reaching the stormwater catch basin in the first place. Providing funding to the regional stormwater pollution control agency for public education could be another way of mitigating the impact of automobile pollution.

**Response.** In order to lessen the impacts of water pollution through the transmission of parking lot particulate matter to the Bay by stormwater runoff, BART will maintain a regular schedule of parking lot sweeping to remove particulate matter from the lots. The increased use of BART will decrease the use of the private automobile, which should, in turn, reduce the total automobile mileage driven and reduce both air and water pollution. An educational program to inform automobile owners on proper car maintenance is beyond the scope of BART's responsibility. BART will certainly support any such efforts undertaken by an appropriate regulatory agency. Please refer also to Response 19.94 for a discussion of mitigation measures for dissolved toxics.

41.23. (Page 3.7-20 [of the Summary DEIR/SDEIS]) Mitigation Measure 7. Habitat Restoration Plan for the San Francisco Garter Snake....There are several possible flaws with this mitigation. It is

not clear who owns the property in question (SFIA?), and if they are willing to deed that property to the state, or to allow the mitigation. Furthermore, this mitigation depends on the use of potable water.

**Response.** The proposed Habitat Conservation Plan is no longer under consideration. Please refer to Response 4.4 for discussion of the mitigations plan developed in consultation with the resource agencies. The SFIA owns the property in question and has indicated its support of a mitigation plan, contingent upon integration of the mitigation plan with other potential land uses on the west of Bayshore parcel. Potable water sources would be negotiated at the time of implementation if the mitigation measures are selected. Please refer also to Response 41.20 for additional discussion of this issue.

- 41.24. The project traverses the already identified flood prone areas, and proposes to build on fill to raise BART structures above possible flooding. This appears to exacerbate an already difficult situation, because BART structures and facilities would increase the amount of impermeable surfaces, thereby increasing runoff and aggravating flooding. This will worsen water quality in the Bay as well as cause damage to the impacted areas. It is not reasonable to dismiss probably negative impacts by claiming that local infrastructure is presently inadequate or that local development plans have potentially more significant effects than BART development.

**Response.** The measures listed in the DEIR/SDEIS can successfully mitigate the effects of BART construction on the flooding of the local area and the possible degradation of Bay water quality. The intent of mentioning the deficiencies in existing infrastructure and the scope of local development plans was not to dismiss the impacts, but to give perspective of the relative size of BART's contribution to the total problem.

- 41.25. The main areas of impact are flood hazard, soil erosion, water quality, and groundwater....The proposed Mitigation Measures must be monitored throughout construction and on an ongoing basis when operations begin. BART should be required to reimburse cities and agencies for damages attributable to impacts associated with BART.

**Response.** Performance criteria for the various mitigation measures will be developed during final design of the project. These criteria will be used to evaluate the effectiveness of the mitigation measures during the construction phase of the project. BART, or other local agencies which accept the long-term responsibilities of maintenance and repair for the various systems, will observe the performance of the systems and correct deficiencies in their operation if any are noted. BART will enter into Memoranda Of Understanding (MOUs) with the local agencies affected by BART construction. The MOUs will define the level of liability and responsibility of each party for the improvements and any potential damages that may arise from their construction and operation.

- 41.26. We are concerned about the short term impacts during construction, particularly for PM<sub>10</sub> levels. There must be regular monitoring of dust created by disturbance of soil and construction traffic, monitoring of CO levels due to traffic congestion and delays caused by detours. How will BART ensure that construction caused dust will not create adverse health effects for residents and employees in the project area?

**Response.** There currently is no EPA-approved model for quantitative analysis of local particulate matter (PM10) impacts. Construction-related PM10 impacts were evaluated solely on a total regional emissions basis.

Numerical significance thresholds for total regional PM<sub>10</sub> emissions were developed from Bay Area Air Quality Management District (BAAQMD) guidance and are identified in Table 3.10-4 of the DEIR/Technical Appendix. The significance thresholds are not health-based levels, but instead represent emissions levels that may tend to worsen regional air quality (the primary regional PM<sub>10</sub> issues are visibility and acid rain formation). Exceedances of the significance thresholds would not necessarily result in localized airborne PM<sub>10</sub> concentrations in excess of the state or federal ambient air quality standards.

As discussed in Section 3.13.13 of the DEIR/Technical Appendix, predicted construction-related PM<sub>10</sub> emissions exceed the significance thresholds. Although mitigation measures would be implemented during construction to minimize PM<sub>10</sub> emissions (please refer to Response 19.134), the emissions would still exceed the significance thresholds and therefore constitute an unavoidable significant impact. However, the predicted PM<sub>10</sub> emissions would not necessarily result in airborne PM<sub>10</sub> concentrations in excess of the state or federal ambient air quality standards. Monitoring of PM<sub>10</sub> concentrations would not provide any additional mitigation of the impacts.

Please refer to Response 19.134 for a discussion of the measures that will be implemented to minimize the amount of particulate matter generated during construction.

- 41.27. The financial impact upon the localities and SamTrans for temporary traffic controls, traffic guards, new local access routes, temporary detours, bus rescheduling and public notice of changes to traffic patterns is not mentioned. These measures could be a significant financial impact to the entities affected. Will the costs for these measures have to be borne by the local jurisdictions and SamTrans, or will BART pay for these construction related costs? What enforcement methods do local communities have to ensure the formation of and compliance with an acceptable Transportation Management Plan?

**Response.** The traffic management plan to be prepared as part of the construction plan will include information on the need for temporary detours, signage, bus rescheduling, public notices, and methods of traffic control throughout the construction period. The cost of these measures are included in the cost estimates for the BART extension. As part of all mitigation measures proposed in the DEIR/SDEIS, a mitigation monitoring and reporting plan will be written and implemented throughout construction and into operations of the extension to ensure that the measures are adequately performed. BART Specification Standard Section 01560 requires the contractor to produce a traffic plan, including traffic controls. The traffic plan should show drawings with proposed traffic control devices. The contractor would apply to the jurisdictional agency for approval of the plan and for a permit or permits to work in the public right-of-way. The contractor would furnish, install, operate, maintain and remove, when no longer required, all traffic control and protection devices required for the approved traffic plan. Traffic control and protective devices will include temporary directional electrical warning signs, detour signs, danger signals, temporary barricades, guard rails, crash cushions, temporary lighting, overhead warning lights, flashing lights, temporary pavement markings, removal of permanent and temporary pavement markings, and services of qualified flaggers. The contractor would maintain communication with the jurisdictional agency(s) regarding the contractor's operations in maintaining and controlling traffic.

The trade-off between construction impacts and long-term impacts is quite clear. An unobtrusive alignment (i.e., subway) requires a more complex and lengthy construction process, whereas an at-grade alignment involves a simpler construction process. The most significant difference among alternatives and construction complexity is vertical alignment. If minimum construction duration and complexity is considered paramount, then at-grade or aerial construction would be faster than retained cut or subway construction. At-grade and retained cut profiles require protective fencing on

each side of BART's tracks, thus tending to divide the community. If long-term unobtrusive BART operations and community cohesion are considered paramount, then subway construction is appropriate. Subway construction has been selected in areas of high population density, and BART and SamTrans have adopted an LPA with significant subway construction. BART will do its best to assure construction will have the least impact to its constituents along the right-of-way and in the long term, provide services that enhance residential and business communities.

Please also refer to Response 22.1 for a discussion of SamTrans service during construction.

- 41.28. CalTrain service impact will be "significant and unavoidable" according to the EIR, even though BART will construct a temporary track. Mitigation Measures 4.1, 4.2, and 4.3 are to minimize track alignment, adequately notify passengers and coordinate construction with CalTrain. Quantification of the impact differences [during construction] between the various BART alternatives is not provided; this would have provided useful information on the attractiveness of the various build alternatives to a CalTrain user.

**Response.** Impact 14 on page 3.13-32 of the DEIR/Technical Appendix states that, "Where construction of the proposed project crosses the SPTCo/CalTrain right-of-way, delays to CalTrain operations and schedule would occur. (S)" Implementation of Mitigation 14.1, 14.2, and 14.3, i.e., minimize track re-alignments, passenger notification of delays, and coordination with CalTrain, would reduce this impact, but it would remain significant and unavoidable under all of the BART build alternatives. Under Alternative III with the aerial alignment through downtown San Bruno, this impact would be less but still significant. Impact 14 applies to all the BART build alternatives except Alternative III with some variations under Alternative IV, V-A, V-B and VI as described below.

Alternatives IV and V, Design Options V-A and V-B, with the I-380 San Bruno Station option, would require relocation of 2,000 feet of CalTrain track and station vehicle parking, resulting in delays to CalTrain service. The 1992 LPA, Alternatives III, IV, V, and VI and Design Options V-A and V-B with either the Tanforan or Downtown San Bruno Station options, would avoid the impacts of an I-380 Station.

**Response.** The need to temporarily relocate CalTrain tracks and the use of shooflies would be the construction activities which cause potential delays in CalTrain service. All temporary relocations and shooflies would be designed in accordance with the requirements and train speeds specified in the CalTrain design criteria. Single tracking may occur during the course of construction between crossovers that would be approximately one mile apart. Such single tracking would be limited to one location at any one time during construction of the BART extension. When a train crosses over from one track to another, its speed is governed by the crossover design, typically 27 mph.

CalTrain travels at an average speed of approximately 50 mph through the reach between San Bruno and Burlingame, the area subject to construction impacts. For train speeds cited above, the resultant delay from one mile of single tracking would be approximately one minute, based on a travel speed of 27 mph for 2.2 minutes. The delay period is within the tolerance of CalTrain schedules and should not be a major inconvenience to its patrons. Based on conceptual engineering done for the environmental document, all of the Bart build alternatives, except for Alternative III, would have similar impacts to CalTrain service. Alternative III would have less impacts to CalTrain service than the other BART build alternatives.

Also, please refer to Response 11.3 which presents revised mitigation measures which would reduce construction impacts to CalTrain service resulting in minor delays which would be insignificant under Alternative VI and the Aerial Design Option LPA.

- 41.29. Utility service disruption is likely to occur during construction....The incremental financial costs to local jurisdictions and utilities are not mentioned and would be part of the traffic management plan.

**Response.** Disruptions to existing utility service will be infrequent and will be minimized by careful design and construction schedule planning. Some utility providers (storm drain, sanitary sewer, water) may opt to have the BART contractor design and construct the modifications or additions to their systems, if necessary. Other providers (power, telephone) may opt to design and construct their own modifications. Costs for all work involving existing utilities will be negotiated between BART and the utility providers. An environmental impact assessment is not required to address the fiscal impacts of a proposed project under NEPA or CEQA.

- 41.30. Visual quality will be impacted during construction....There are no mitigation measures provided for loss of privacy by encroachment of BART construction activities. One possible mitigation measure would be the use of visual screening between construction areas and nearby sensitive receptors. There are nine neighborhoods that could be affected. No assessment is made regarding possible permanent loss of privacy...

**Response.** Construction areas will be clearly marked by the contractor. Mitigation Measure 1.4 on page 3.13-69 of the DEIR/Technical Appendix identifies the use of fencing around contractor laydown areas to screen the site from sensitive receptors. Permanent loss of privacy is acknowledged under the proposed project, the I-380 Least-Cost Design Option, the Base Case Alternative, and Alternatives IV and VI. Table 2.4-2, Comparison of Key Impacts, on Page 2-89 of the DEIR/Technical Appendix, shows in bold and underlined text the sensitive receptor impacts that would be significant and unavoidable.

There will be no permanent loss of privacy in neighborhoods where BART is placed in a subway, since the ground will be restored to a setting similar to the existing condition at the completion of construction.

- 41.31. Scenic resources will be impacted by the various BUILD alternatives....The DEIR does not distinguish between temporary and permanent impacts. Three of the five scenic resource impacts listed will be permanent. This is not clearly stated in the DEIR. The three are: the open space west of Highway 101 owned by SFIA, aerial segment along San Bruno Avenue under alternative IV, and the widening and realignment of Huntington Avenue for some alternatives.

**Response.** The DEIR/Technical Appendix distinguishes between temporary or short-term impacts and permanent or long-term impacts. Temporary impacts are described in Section 3.13, Construction, and permanent or operational impacts are described in Sections 3.1 through 3.12, Environmental Analysis. The loss of open space west of Highway 101 is identified as a significant operational impact under the proposed project on page 3.3-41, under the Base Case Alternative on page 3.3-61, under Alternative IV on page 3.3-70, and under Alternative V on page 3.3-82. Loss of this scenic resource is also acknowledged as a significant short-term construction impact under the proposed project on page 3.13-72, under the Base Case on page 3.13-75, under Alternative IV on page 3.13-77, and Alternative V on page 3.13-79.

The loss of views resulting from the aerial segment of Alternative IV along San Bruno Avenue is addressed on page 3.3-63 and is acknowledged as significant. Since this is an operational impact,

it is a permanent impact. Construction of this segment would also result in loss of views and is acknowledged as significant on page 3.13-76.

As described on pages 3.3-76 and 3.3-77 of the DEIR/Technical Appendix (Impact 11), widening and realignment of Huntington Avenue would not result in significant visual impacts under Alternative V. No scenic resources or significant views would be compromised by widening this road.

- 41.32. Construction would potentially delay response times for emergency services. Additional mitigation measures should be considered to include phasing of construction to reduce or eliminate simultaneous closure of adjacent vehicle routes.

**Response.** The phasing of construction activities have been considered in order to minimize impacts to emergency service provision and traffic circulation in this environmental document. This discussion appears primarily in Section 3.13, Construction/Transportation, of the DEIR/SDEIS. Further details regarding coordination of street closures and emergency response are provided in Response 14.83.

- 41.33. Geology, soils and seismicity impacts may be caused by groundwater seepage into excavation sites below the water table and cause ground settlement....The DEIR wording of "acceptable settlement" implies that some ground settlement to nearby structures (owned by others) is to be expected and would be unavoidable, though this terminology is not used in the DEIR. Financial liability for damage to nearby structures is not addressed in the DEIR. What are the "acceptable limits of settlement" referred to in these measures?

**Response.** Financial liability for settlement-related damage to nearby structures will be assigned to the contractor in the construction contract documents. Acceptable limits for settlement are typically determined based on the maximum angular distortion which can be tolerated without architectural damage (cracking) or disruption of utility connections. For a specific building, these limits are dependent upon the type of construction and the span between supporting columns. Acceptable limits will be established on a case-by-case basis during the final engineering phase of the project based on the building, soil and ground water conditions; adherence to these limits will be monitored and enforced during construction.

- 41.34. Several alternatives would cause takings of parks, removing this resource altogether, with no mitigation. The closure for nine months of Lion's Field would be particularly harmful because there is no alternative space of this size that could satisfy recreational needs.

**Response.** The commentor's concerns regarding possible closure of Lion's Field Park under Design Option V-A and Alternative VI are noted. The DEIR/Technical Appendix acknowledges that the loss of this park, which is of considerable recreational importance to the community, would be very significant. The DEIR/Technical Appendix does in fact identify mitigation measures that would avoid a take of Lion's Field. On page 5-16, the document notes that selecting either contractor laydown area Option 1 (an option only for Alternative VI; it is not applicable for Design Option V-A) or Option 2 would avoid the park.

- 41.35. The BART/SFO Extension depends on funding from federal, state, and local sources. Unfortunately, the committed funds for capital costs amount to only \$498 million (Table 6-3) to be applied to costs ranging from \$803 million to \$1.269 billion. Tables 6-6 and 6-7 identify "potential" revenue sources and amounts. The political and economic realities of transportation funding have changed enormously since planning began for this project. There is very little evidence that any of these "potential" monies will ultimately be available.

**Response.** Please refer to Response 14.93 for a discussion of potential funding sources.

41.36.

The 1995 DEIR analysis is inconsistent with Resolution 1876 because it fails to calculate the effects of the CalTrain extension with the alternatives added since the 1992 AA. This deficiency must be corrected by conducting an assessment, for each alternative, of capital costs, Operating and Maintenance expense, ridership, mode shifts (transfers), connectivity, travel times (the 1995 DEIR provides Travel Times only for alternatives V-A and V-B; this information should be provided for all alternatives), impacts on freeways, road segments and intersection LOS, and other factors addressed in Section 3.1, Transportation, and not accounted for in the financial analysis. Impacts must also be evaluated for each affected transit system in the project area, i.e., SamTrans, CalTrain, and BART.

**Response.** Please refer to Response 11.6 for a discussion of the CalTrain downtown extension. Travel times for all alternatives, except for Design Options V-A and V-B, are provided in the Analysis by Alternative portion of the transit subsection in Section 3.1 of the DEIR/Technical Appendix.

The transit impacts of the CalTrain downtown extension to transit patronage and transfers between selected transit systems for the Alternative VI Aerial Design Option was addressed in the FRDEIR/S#2DEIS in Section 3.1, Transportation. The traffic information in the DEIR/SDEIS presents a worst-case scenario, because the number of vehicles accessing a BART station in South San Francisco, San Bruno, and Millbrae would decline with the extension of CalTrain to downtown San Francisco. The decline in vehicles to the BART station more than compensates for the slight increase to the CalTrain stations in these three cities.

Please refer to Response 14.92 for a discussion of why a complete analysis of the CalTrain extension to downtown San Francisco, including financial analysis, is not included in the DEIR/SDEIS for the BART extension. Information on capital and operating costs as well as all other aspects of the proposed CalTrain extension are available in the environmental documents pertaining to that project.

Please refer to the Response 11.6 for a discussion of ridership and transfers with the CalTrain downtown extension. Please refer to Response 54.4 for a discussion of the number of linked trips with and without the CalTrain downtown extension under the TSM and Base Case Alternatives. Please refer to Response 107.84 for a discussion of travel time comparisons under the Base Case Alternative with and without the CalTrain downtown extension.

41.37.

The federal Cost Effectiveness Index must be calculated for each alternative with respect to downtown extension of CalTrain, and not limited to the calculations presented in Table 6-10.

**Response.** The FTA, as designer and user of the cost-effectiveness index data, does not require that a proposed project review the indices of other proposed projects in the region or elsewhere. Please refer also to Response 41.6 for further discussion on BART's Cost Effectiveness Index.

41.38.

The funds of Operating and Maintenance costs are also uncertain and are particularly affected by other program and operating commitments of SamTrans, CalTrain, and the San Mateo County Transportation Authority.

**Response.** SamTrans has performed a Financial Capacity analysis which is periodically updated. The Financial Capacity analysis projects future revenues and expenditures for all of SamTrans' programs. The Financial Capacity analysis was considered by the Board of Directors

during its selection of the Alternative VI Aerial Design Option as the Locally Preferred Alternative. The SamTrans Financial Capacity analysis, based upon ridership and revenue projections, indicates that the costs associated with operating the extension will be covered by passenger fares. This is the estimated cost for acquisition of additional equipment to support increased bus service and, if required, will be funded out of the federal grants.

- 41.39. While construction may provide 5000 temporary jobs and operation could create up to 675/1125 direct/indirect jobs, there would be concomitant impacts on traffic congestion and housing supply. These negative effects would indirectly affect the ongoing ability of the cities and local transportation agencies to fund either capital or operating and maintenance costs.

**Response.** A major public investment in a transit system, or other infrastructure, is considered to be a local benefit during construction, as well as during lifetime operation of the system. Public investment results in creation and support of jobs, purchases made at local suppliers, and indirect support of businesses through secondary spending. Traffic and housing impacts may result from job creation, but would not have a measurable net effect on the ability of cities and local transportation agencies to fund capital and operations and maintenance costs.

- 41.40. While the listed impacts may be mitigated to some degree by measures named in other chapters, they do not appear to adequately compensate for the hardship that will be forced upon already disadvantaged populations. Low income populations are typically more transit dependent than other groups, and persons presently residing in the project area are relatively well served by public transportation; they may be presumed to be in need of transit. Displacement to neighborhoods outside the project area moves them from easy access to transit and further threatens their mobility.

**Response.** There is no evidence to suggest that easy access to transit will not be available for any transit-dependent individuals or families relocated from their current residences. Displaced residents are expected to generally be relocated within the community, where CalTrain and SamTrans bus service are in place and available. BART service will only add to the level of transit service available.

## 42. FIFTH ADDITION NEIGHBORHOOD ASSOCIATION

- 42.1. [Fifth Addition Neighborhood Association] supports Alternative VI, with the bored-tunnel option through San Bruno.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (refer to Response 2.7 for a discussion of the LPA selection process). A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68; refer to Response 66.115.28 for a comparison of the short- and long-term construction impacts of bored tunnel vs. cut-and-cover methods.

- 42.2. We are also concerned about pedestrian access between the Fifth Addition neighborhood and the area to the West.

**Response.** The revised plan for the Tanforan Station includes relocation of Huntington Avenue between the Fifth Addition neighborhood and the underground BART tracks. Pedestrian access across Huntington Avenue, i.e., between Huntington Avenue East and the Tanforan Shopping Center, would be provided.

Three traffic signals with pedestrian crosswalks would be located along Huntington Avenue, between the Fifth Addition neighborhood and the Tanforan Shopping Center plus the BART station. One traffic signal would be at the intersection of Huntington Avenue and Sneath Lane; the second signal would be at the bus entrance to the BART station across from the Atlantic/Maple Avenue intersection; and the third signal would be at the former Emporium parking garage entrance, across from the intersection of Scott Street and Huntington Avenue East.

- 42.3. We oppose the "taking" of [Bayshore Circle Park and Herman Tot Lot] and also oppose using them as "laydown" areas during construction. As shown in Table 5-1 of the DEIR/Technical Appendix, The Herman Tot Lot would be taken under the 1992 LPA, and is considered a potential construction use site under the I-380 least cost design option. Bayshore Circle Park noted as a potential construction use site under Alternative VI as it would be under the Aerial Design Option LPA.

**Response.** As shown in Table 5-1 of the DEIR/Technical Appendix, the Herman Tot Lot would be taken under the 1992 LPA and was evaluated as a potential constructive use site under the I-380 Least-Cost Design Option. Bayshore Circle Park was also evaluated as a potential constructive use site under Alternative VI, as it would be under the Aerial Design Option LPA. Based upon further engineering performed subsequent to release of the DEIR/SDEIS, however, it has been determined that the laydown area initially identified along Bayshore Circle in the Fifth Addition neighborhood area is no longer required. Consequently, impacts associated with this laydown area would not occur and Section 4(f) impacts noted for Bayshore Circle Park in Chapter 5 of the DEIR/Technical Appendix no longer apply. Accordingly, this park is deleted from the list of affected Section 4(f) resources on page 5-2, paragraph three, sentence one of the DEIR/Technical Appendix (this text change is shown in Response 19.16).

The section titled "Bayshore Circle Park" on pages 5-2 through 5-6 of the DEIR/Technical Appendix is also deleted, as is Figure 5-2 on page 5-5. In addition, the first row in Table 5-1 on page 5-4, which summarizes impacts at Bayshore Circle Park, is deleted. The revised Table 5-1 is shown following Response 19.16.

The commentator's opposition to the take of Herman Tot Lot under the 1992 LPA is noted. The portion of this park and any facilities used during construction of the BART subway would be rebuilt after construction, which would last approximately six to nine months.

- 42.4. To use our area [Fifth Addition] as a "laydown" location for the BART construction would severely impact the daily lives of the residents for perhaps two years.

**Response.** As noted in Response 42.3, Bayshore Circle is no longer being considered as a potential contractor laydown area.

- 42.5. When the tracks [Bayshore Circle SP Spur line] are removed, we would like this area to be designated as a "green belt" with more landscaping added.

**Response.** There is currently no proposal to add more landscaping or to remove the tracks at the Bayshore Circle portion of Southern Pacific San Bruno branch under any of the BART build alternatives. If the City of San Bruno wishes to expand Bayshore Circle Park, BART will cooperate. It would be the responsibility of the local jurisdiction to construct and maintain any proposed improvements.

- 42.6. Any attempt to widen Bayshore Circle North and South Streets would encourage through, non-residents traffic. We would oppose this increase in traffic though our neighborhood.

**Response.** None of the alternatives studied in the DEIR/SDEIS include the widening of Bayshore Circle North or South Streets. Mitigation associated with a significant impact is also not included under any of the alternatives studied in the DEIR/SDEIS. Similarly, the study area for the FRDEIR/S#2DEIS does not include the Fifth Addition neighborhood, so nothing was contained in that document concerning Bayshore Circle North or South Streets.

- 42.7. Since we support Alternative VI, we have been very interested in the development of the BART Tanforan Station Concept.

**Response.** For further details regarding the development of the BART Tanforan Station Concept, please refer to Responses 17.3, 17.4, 17.5, 17.6, and 17.7.

- 42.8. Attached are eight pages of a petition signed by residents, and relatives and friends, of the Fifth Addition neighborhood, who oppose the taking of any homes in the neighborhood [for a BART Tanforan Station and parking facility]. We request that the BART Policy Committee preserve our homes and the continuity of our lives and our neighborhood.

**Response.** As shown in Section 3.2.4, Acquisition and Displacement Impact Assessment and Mitigation, in the DEIR/Technical Appendix, two of nine BART alternatives or design options would displace single family and multi-family residences in the Fifth Addition. The 1992 LPA and the I-380 Least-Cost Design Option would cause the displacement of approximately 15 to 18 single family residences and approximately 25 multi-family residences in the Fifth Addition. The other alternatives and design options would not displace residences in the Fifth Addition.

Based on the environmental information in the DEIR/SDEIS and on a preliminary evaluation of comments received, the BART and SamTrans boards selected the Alternative VI Aerial Design Option as the new LPA on November 28, 1995 for advancement to further preliminary engineering and environmental evaluation. The Aerial Design Option LPA would not displace residences in the Fifth Addition.

#### 43. GARDEN VALLEY HOMEOWNERS ASSOCIATION

- 43.1. The proposed BART station at Hickey Boulevard...will be in effect an earth filled dam across a known existing flood plain. In your summary we see no solutions for passing flood waters over, under or past this obstruction.

**Response.** Please refer to Response 15.4 for a discussion of mitigation impacts associated with the Colma Creek flood plain.

- 43.2. The proposed elimination of the existing concrete culverts which presently transport flood waters through the area to the Bay...must remain, in addition to the necessary added flood water transports provided by BART.

**Response.** Any existing culverts that are disturbed by BART construction will be either replaced in kind, or a replacement culvert in a new location will be constructed. Replacement culverts would provide storm water flow capacities equal to or greater than the capacity of the original culvert.

- 43.3. The high density residences being proposed by South San Francisco in the vicinity of the station and located right in the middle of the flood plain can only contribute further to the many flooding problems in this area.

**Response.** Projects such as those proposed as part of the South San Francisco redevelopment project have been acknowledged by Reimer Associates in preparing the drainage improvements for that Flood Control Zone.

#### 44. REDWOOD CITY SAN MATEO COUNTY CHAMBER OF COMMERCE

- 44.1. The Board of Directors, at its February 23, 1995 meeting, voted to submit written comments supporting the BART Extension to San Francisco Airport as in the best interests of the economy of Southern San Mateo County subject to [certain] conditions...

**Response.** The commentor's general support for the BART extension to SFIA is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. The Alternative VI Aerial Design Option was selected as the LPA by both boards (refer to Response 2.7 for a discussion of the LPA selection process).

#### 45. REGIONAL ALLIANCE FOR TRANSIT

- 45.1. Consider a CalBART alternative using existing heavy rail (CalTrain) between San Francisco International Airport (SFO) and downtown San Francisco near the Montgomery Street BART Station.

**Response.** The commentor's support for the CalBART proposal is noted. Please refer to Response 13.4 for a discussion of this proposal.

- 45.2. If that reconsideration is not possible we recommend a no-build alternative because of the exorbitant cost of this project.

**Response.** The commentor's opposition to all of the build alternatives is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. As noted in Response 2.7, the Alternative VI Aerial Design Option was selected as the LPA by both boards. Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18.

- 45.3. A CalTrain downtown extension to two alternative sites...would vastly increase the number of passengers on CalTrain....This increase would clearly change the analysis of the effectiveness of using CalTrain (either detoured through SFO itself or accessed via light rail). Almost as important, a CalTrain alternative will provide transit access to the south of SFO where most of SFO's employees live.

**Response.** The proposed BART-SFIA Extension would provide access to SFIA for airport employees and air passengers using CalTrain. For example, CalTrain patrons traveling to the airport would transfer to BART at the Millbrae Avenue Station under Alternative VI or the Aerial Design Option LPA. Please refer to Response 11.6 for a discussion of transportation-related impacts of the BART extension with the CalTrain downtown extension.

#### 46. SAN BRUNO CHAMBER OF COMMERCE

- 46.1. The San Bruno Chamber of Commerce declares its support of the San Bruno City Council's choice of Alternative VI with mitigation of impending traffic congestion, economic impact to adjacent commercial districts, social and safety issues to the community. The only option for BART tracks through San Bruno from Tanforan Park Shopping Center is by subway and that a bored tunnel be built from Euclid Avenue on the north to an area that intersects with the bored tunnel to and from San Francisco International Airport.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (refer to Response 2.7 for a discussion of the LPA selection process). A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

- 46.2. The intersection of Huntington Avenue, San Mateo Avenue, San Bruno Avenue, and the CalTrain tracks, that's one intersection, are of immediate concern. More than 250 large and small businesses front on these three commercial streets within a four block radius of this intersection and will suffer short and long term impacts. The ground surface of this intersection must not be disturbed before, during or after construction of BART to SFIA....Closure or displacement to the thru-traffic that presently exists on San Mateo Avenue would cause temporary interruption of customer flow and permanent closure of these businesses.

**Response.** The DEIR/Technical Appendix acknowledges the disruption to local businesses resulting from construction of the BART extension. Under the Construction/Land Use discussion in Section 3.13.4, for each alternative, loss of access to businesses relying on pedestrian and vehicular traffic on San Bruno and San Mateo Avenues is presented as a significant adverse effect. To minimize these disturbances and the economic impacts to the affected businesses, BART proposes to meet with each local jurisdiction to formulate a Construction Plan that will identify access requirements, street closures, detour routes, public notices regarding construction activities, parking restrictions, and prepare for other aspects of the construction period. The conditions under which BART/SamTrans will financially assist affected businesses are explicitly defined in the state and federal relocation laws.

- 46.3. Loss of tax revenues to the city may result in a reduction of police, fire, and needed repairs and improvements to the infrastructure.

**Response.** Please refer to Responses 14.57 and 14.59 for a discussion of the cost of emergency services, and Response 47.19 for a discussion of project benefits.

- 46.4. At least forty-three of the businesses on the street are minority-owned; eleven are owned by women. There are nine unique markets in the 400, 500, and 600 blocks which purvey specialty fresh foods for Asian, Hispanic, Fijian, Samoan, Tongan, East Indian, Jamaican, Korean, and other ethnic minority populations.

**Response.** The information on the minority and ethnic diversity of businesses in the downtown San Bruno area is appreciated. Please refer to page 3.13-56 of the Summary DEIR/SDEIS for a discussion of proposed mitigation measures to help maintain access to affected businesses.

46.5. San Bruno Avenue from the Huntington Avenue intersection with El Camino Real will be strongly impacted by the station as Tanforan and must be widened from Highway 101 to El Camino Real.

**Response.** Table 3.13-2 of the DEIR/Technical Appendix indicates the streets that would be decked and how long traffic restrictions would be in place during the decking process. Alternatives III through VI would affect this intersection; refer to Impact 6 on pages 3.13-58, 3.13-60, 3.13-62, and 3.13-65. Please refer to Response 17.25 for discussion of traffic impacts on San Bruno Avenue with the Tanforan Station.

46.6. Additional BART patronage to/from the Tanforan Station will cause Huntington Avenue to be less than adequate even with four lanes of traffic. San Bruno Avenue from the Huntington Avenue Intersection to the El Camino Real will be strongly impacted by the station at Tanforan and must be widened from Highway 101 to the El Camino Real.

**Response.** According to the analysis in the DEIR/SDEIS, Huntington Avenue would not be significantly impacted, including the segment between San Bruno Avenue and Sneath Lane. Please refer to Response 17.27 for a discussion of traffic impacts to Huntington Avenue between San Bruno Avenue and Sneath Lane and to Response 17.25 for a discussion of traffic impacts to San Bruno Avenue between Huntington Avenue and El Camino Real.

46.7. No mention at all is made of Alternative VI or Alternative VI Bored Tunnel Option in this section in spite of the fact that Alternative VI is the only alternative that calls for a widening and realignment of Huntington Avenue. However, Alternatives IV, V, and Options V-A and V-B are analyzed for their impact on San Bruno Avenue, El Camino Real, Sneath Lane and Huntington.

**Response.** Alternatives IV and V as well as Design Options V-A and V-B were analyzed with the I-380 San Bruno Station option. The Downtown San Bruno Station option was also examined for Alternative V and Design Options V-A and V-B. The traffic impacts of the Tanforan Station were analyzed for the 1992 LPA, Alternatives III, IV, V, and VI.

The comment references "Summary Comparison of 2010 Impacts," Chapter 3.1, on pages 115 to 116 of the Summary DEIR/SDEIS. This section compares impacts and benefits between the alternatives. A summary of significant traffic impacts to intersections in the study area, including the Huntington/Tanforan Driveway North intersection, is listed immediately above this section, on page 115. Please note that the traffic impacts with the I-380 San Bruno Station option were analyzed under Alternatives IV and V as well as Design Options V-A and V-B, while the Downtown San Bruno Station option was examined under Alternative V and Design Options V-A and V-B. The traffic impacts of the Tanforan Station were analyzed under the 1992 LPA and Alternatives III and VI. The traffic impacts to local streets vary substantially depending upon the location of the proposed BART station.

46.8. The DEIR/DEIS...fails to characterize the mutual dependence of the Tanforan/Towne Center regional shopping area and the downtown San Bruno commercial district on the complex of streets which include San Bruno Ave, from I-280 to Highway 101, San Mateo Avenue from El Camino Real to Linden in South San Francisco and Huntington Avenue from Spruce Avenue on the north to Angus Avenue on the south.

**Response.** Refer to Table 3.13-2. No streets in San Bruno would be closed, and every attempt will be made to avoid disruption of traffic patterns in the commercial districts of San Bruno during the BART construction process.

- 46.9. The Chamber would encourage the City and BART develop a "greenway" with meandering sidewalks, a PAR course (space permitting), bermed lawns, trees and low shrubs wherever the surface is disturbed and replaced.

**Response.** After construction is completed, the area above the subway box is typically restored to its existing state before construction. For the parking area between Huntington Avenue and the CalTrain track, a staged construction plan for replacement parking has been developed under Alternative VI and the Aerial Design Option LPA. Refer to Response 17.69 for additional discussion of replacement parking. If the City of San Bruno wishes to convert other sections above the subway box for a greenway, BART will cooperate. It would be the responsibility of the local jurisdiction to construct and maintain any proposed improvements.

#### 47. SAN BRUNO, CITIZEN'S COALITION

- 47.1. If BART never extends south of the Colma BART station, many people will be relieved. We will still have to come up with a plan to lessen the growing traffic on our highways but maybe we will find a solution that deals with a county-wide corridor rather than the very narrow six-mile corridor addressed in the Draft EIR.

**Response.** The commentor's opposition to extending BART south of Colma is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. As noted in Response 2.7, the Alternative VI Aerial Design Option was selected as the LPA by both boards. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18.

- 47.2. Threatening to revert to the Base Case if local cities cannot come up with extra funding is extortion. Besides, no city along the line wants the Base Case through their town.

**Response.** The commentor's opposition to the Base Case Alternative (Alternative III) is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (refer to Response 2.7 for a discussion of the LPA selection process).

- 47.3. Use the components of Alternative VI in a less expensive manner. From the Colma station, the tracks follow the alignment, just as in Alternative VI, in a subway to the Hickey station in South San Francisco. It continues south in a subway to the Tanforan station, integrated into the Tanforan Shopping Center, as suggested in Alternative VI. Then, the line is bored-tunnel from Euclid to just south of Sylvan, coming up on the east side of the existing CalTrain tracks. From there it parallels the CalTrain right-of-way in a cut-and-cover tunnel all the way to the Millbrae Intermodal Station at Millbrae Avenue....The Millbrae Intermodal station would be connected to the airport by the Airport Light Rail System that the airport is going to build anyway.

**Response.** Some elements of the San Bruno Citizen's Coalition proposal are either part of the Aerial Design Option LPA or its design refinements and some elements are not. As suggested by the Coalition's proposal, the Aerial Design Option is subway from the Colma Station through the subway Hickey Station to South Spruce Avenue. The design refinement to the Aerial Design Option has a retained cut alignment from south of South Spruce Avenue to Sneath Lane instead of a subway alignment in this reach as suggested by the San Bruno Citizen's Coalition.

Design refinement to the Aerial Design Option LPA does integrate the BART Station into the Tanforan Station but not as shown in Alternative VI. The Aerial Design Option LPA design refinement, accepts major components of the Tanforan/BART Station Concept plan as proposed by the City of San Bruno and the Hapsmith Company. Please refer to Responses 17.2 through 17.7 for a discussion of acceptance of major components of the Tanforan/BART Concept Plan. This does integrate the BART Station into the Tanforan Shopping Center as suggested by the Coalition's proposal.

The design refinement to the Aerial Design Option is cut-and-cover subway south of the Tanforan Station to the San Bruno City limits. The subway alignment would transition to the east side of CalTrain south of Sylvan Avenue. The reach would not be constructed in a bored tunnel as in the San Bruno Tunnel Construction Option from Euclid to Sylvan Avenue. Please refer to Response 17.68 for a discussion of why the tunnel construction option through San Bruno is infeasible.

South of Sylvan Avenue, the Coalition proposal is cut-and-cover subway straight through to a BART/CalTrain/ALRS intermodal station at Millbrae Avenue. Under the Coalition's proposal the Millbrae intermodal station would be connected to the Airport by the ALRS without an aerial BART connection to the Airport as under the Aerial Design Option LPA.

The possible Airport Light Rail connection to CalTrain is the topic of another study. The San Mateo County Transportation Authority and the Peninsula Corridor Joint Powers Board are cosponsoring the CalTrain-San Francisco International Airport Light Rail System Connection Feasibility Study. The study is evaluating the feasibility of connecting the light rail transportation system currently being designed by the San Francisco Airport to CalTrain and will be completed in April 1996. The connection of the ALRS to CalTrain is an independent feasibility study and is separate from the proposed BART-San Francisco Airport Extension Project. The BART-San Francisco Airport Extension Study alternatives are stand alone alternatives.

The Airport and BART have been working together to make the BART-San Francisco Airport Extension project a reality. The Airport Commission will consider the JPB's recommendation at the conclusion of the CalTrain - San Francisco International Airport Light Rail System Connection Feasibility Study.

In 1994 the JPB requested that the Airport proceed with further investigation of the CalTrain/ALRS connection. The Airport responded, that any further action on the connection issue should be delayed pending the outcome of the BART-San Francisco Airport Extension study.

Airport staff are, however, working with and providing information to the JPB and San Mateo Transit Agencies to conduct the CalTrain-ALRS Connection Feasibility Study. The ALRS is also being designed to preserve the ability to extend the system to serve the Airport's west of Bayshore property. However, the San Francisco Airport Commission, the BART and SamTrans boards of Directors have determined a preferred location for the Airport BART Station.

In 1995, the JPB inquired about the Airports Commission's position and legal commitment for a ALRS connection to CalTrain. Based on this request, the San Francisco City Attorney has rendered a legal opinion on the Airport's commitments for making a ALRS connection to the west of Bayshore property for a CalTrain station. The legal opinion is summarized below.

**Issue** Did the Airports Commission, through its adoption of the Airport Final Mitigation plan, commit to extending the ALRS to the west of Bayshore for a CalTrain Station?

**Conclusion** No. The relevant measure in the Final Mitigation Plan provided for an ALRS extension to a combined BART/CalTrain station, and not to a CalTrain only station. Although the Commission is not legally required to extend the ALRS to the west of Bayshore for a CalTrain station, the Commission has discretion to consider such a proposal, subject to legal requirements."

In short, the Airport has not agreed to pay for the extension of the ALRS to connect with CalTrain and it is premature to say that it is going to be built anyway.

Public input regarding the merits of the different alternatives was considered by the BART and SamTrans boards in their selection of the Alternative VI Aerial Design Option as the LPA at the close of the public review period for Volume II of the FEIR/FEIS. Please refer to Volume I of the FEIR/FEIS which explains why BART is pursuing an aerial alignment into the SFIA.

- 47.4. Who benefits by a direct airport station, anyway? Only the airport and the City of San Francisco, not San Mateo County. CalTrain will have better connectivity to the airport from Millbrae with a free "People Mover" running frequently...

**Response.** Air passengers and employees traveling either north or south to the Airport would benefit from a direct BART station at the Airport, as proposed under Alternative VI. Air passengers or employees from the East Bay, San Francisco, or northern San Mateo County could take BART directly to a subway station located at the planned new Airport International terminal. Air passengers or employees from the south could take either CalTrain or a SamTrans bus to the proposed BART/CalTrain station at Millbrae Avenue and transfer to BART to travel to the subway station located at the planned new Airport International terminal. The concept of connecting CalTrain to the Airport with an Airport Light Rail System is an alternative already under consideration in the *CalTrain-San Francisco International Airport Light Rail System Connection Feasibility Study* being analyzed by the Peninsula Joint Powers Board and the San Mateo County Transportation Authority.

In addition, the commentor is referred to Response 242.6 for discussion of MTC forecasts of intermodal transfers between CalTrain, BART, and the ALRS.

- 47.5. Instead of running the tail track into Burlingame, which the city of Burlingame is against, have a side track with inspection pit and short track, up the line just north of Nadia Avenue, approximately 1800 feet from the end of the line. (Matchline 470+00 Figure 9, page 83, in Design Appendix.) Or have no tail track as was the case in the end-of-the-line station in Daly City for years. If you must have storage for 16-20 cars somewhere near the end of the line, (not in Burlingame), maybe it could be just north of Madrone (between Matchline 410+00 and Matchline 420+00. Figure 5, page 50 of Design Appendix) on airport property.

**Response.** The location of the tailtrack north of Nadia Avenue suggested by the commentor violates BART's Design Criteria. Tailtracks need to be on straight sections of track on a grade of 1 percent or less. The section of track north of Nadia Avenue is on a compound spiral curve at a 1.43 percent grade. Having no tailtrack behind the end-of-line station violates BART's Operating Criteria and is one of the reasons that the Daly City turnback and yard was constructed after the original system was built.

There is adequate right-of-way for a storage facility north of Madrone Street under Alternative V and the Aerial Design Option LPA. However, such a tailtrack/storage track would not be operationally efficient and violates BART's Operating Criteria that a tailtrack be located behind each extension end-of-line station. A tailtrack has three primary functions: 1) to turn back trains behind an end-of-line station for operational efficiency; 2) to make longer peak-period trains consist of up to a maximum of ten cars and break up longer trains into shorter trains for off-peak operations; and 3) to provide storage space for out-of-service trains. Having tailtracks behind the end-of-line stations allows for the efficient reversal of trains behind the mainline operations of revenue service trains. A midline storage track north of Madrone Street would require deadheading out-of-service trains between the storage area and station. This adds to car miles and operating costs and would conflict with the operations of revenue service trains; it is, therefore, operationally undesirable.

- 47.6. With an issue that is going to affect our cities and our lives forever, you could at least give us another 60 days to do our homework to make the right comments and recommendations.

**Response.** Please refer to Response 10.2 for a discussion of the length of the comment period.

- 47.7. I know you also met the requirements of the law by issuing a 300 page summary, with the 1,300 page detailed document as a "Technical Appendix," but the summary is not a detailed enough document on which to make informed decisions.

**Response.** The "Summary of the DEIR/SDEIS" is not intended to function as a stand-alone document, providing sufficient information to decision-makers. This 300-page "summary" was prepared at the request of FTA to provide a more comparative analysis among alternatives, a more "user-friendly" document, and a document more consistent with guidelines of the Council on Environmental Quality regarding page limits for EISs. The larger document was prepared to satisfy the California Environmental Quality Act and provide the detail required to make informed decisions.

- 47.8. This is supposed to be a document that the public can comment on. I know it's available at the BART offices and libraries but it takes a long time to get info out of it. And we all have lives--we work. So it's not really a public document.

**Response.** The document was made available to any person requesting a copy, in addition to being available at BART offices and libraries.

- 47.9. As I tried to get information from each source I realized that Table 3.1-5 in the summary, for example, was different from Table 3.1-5 in the Technical Appendix and that bothered me.

**Response.** For consistency, the Summary DEIR/SDEIS and the DEIR/Technical Appendix use the same internal numbering convention for tables and figures. Because these documents are intended to contain different levels of detail, tables and figures in the Summary and Technical Appendix may have identical numbers but different content.

- 47.10. The detail maps in Design Concepts were hard to read. The lines of the maps and construction zones and right-of-ways blend together. You have to be an engineer to read this...

**Response.** The scale used for the drawings included in the Design Appendix was necessary to keep the total number of drawings in the book within a manageable number. Specific questions

regarding details that cannot be understood on the drawings can be directed to the BART Community Relations staff.

- 47.11. I hope all the directors have done their homework thoroughly, have read all 1,300 pages and know how disastrous Alternatives IV and V are to the city and citizens of San Bruno. In many instances even the draft says there is no known way to mitigate the problems caused by these alternatives. These Downtown plans are the worst plans on the books: and you will hear no support for them from anyone who lives here. There is no way to mitigate the destruction they will cause, and no way to contain it.

**Response.** The commentor's opposition to Alternatives IV and V is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the selection process. In November 1995, both boards selected the Alternative VI Aerial Design Option as the LPA over Alternatives IV and V, in part due to the impacts of these latter alternatives (refer to Response 2.7 for a discussion of the LPA selection process).

- 47.12. Why is there no listing of each home and business, by address, to be taken under each alternative?

**Response.** At this stage of the design and engineering, none of the plans for the alternatives have been finalized, and a list of specific property addresses to be acquired or larger-scale maps showing the exact parcels could not be entirely accurate. Properties might be listed now which are not ultimately acquired. The estimate was conservative regarding the maximum number of properties that might be displaced.

- 47.13. The draft has failed to fully identify impacts of ALRS people mover through town under this alternative. Specifically under "Visual Impacts" (3.3) impacts for Alternative V-B (3.3-84 [of the DEIR/Technical Appendix]) says "See impacts for V." The impacts from the ALRS are not listed under Alternative V.

**Response.** Under Alternative V, the ALRS would not extend to downtown San Bruno but would connect with BART at the Millbrae Intermodal Station. Thus, the last two sentences under the paragraph on Design Option V-B on page 3.3-84 of the DEIR/Technical Appendix are stricken and replaced with the following text:

The ALRS would be constructed as described under Design Option V-A. The visual effects of the ALRS and the station facilities on Belle Air residents would be significant, altering close-up views and creating perceptions of visual encroachment.

On page 3.3-83 of the DEIR/Technical Appendix, a new fourth bullet is inserted under the heading "Design Option V-A - Minimum Length Subway to Airport GTC":

- Addition of an elevated guideway for the ALRS, approaching either downtown San Bruno Station from San Bruno Avenue and circling the station;

On page 3.3-83 of the DEIR/Technical Appendix, the following text is inserted above the heading "Subway Option," and each of the subsequent impact statements is renumbered.

## **Subway and Aerial Options**

1. *The ALRS would serve the downtown San Bruno optional station locations and have significant visual impacts on the built environment and for nearby sensitive receptors. (S)*

Under Design Option V-A, the ALRS would connect the Airport and downtown San Bruno stations via an aerial guideway along San Bruno Avenue. The aerial alignment down a widened street would make it more difficult for the city to attain its objective of visually enhancing this major entryway to the city. The above-grade configuration would also obstruct distant views of San Bruno Mountain.

At the station locations, the ALRS would be about 15 feet above ground and pass within 60 feet of existing residents. Specifically, at the I-380/San Bruno Station option, the ALRS would alter views and create perceptions of visual encroachment for residents along 2nd Avenue. The same effects would occur at the Downtown San Bruno Station option for residents along 3rd and Angus Avenues.

**MITIGATION MEASURES.** The same measure recommended for the proposed project, i.e., ALRS design guidelines (Mitigation Measure 17.1), applies to this design option. Although it would reduce the visual effects, it would not reduce them to insignificant levels.

To acknowledge the visual effects of the ALRS under Alternative V, the following modification is made to Impact 18 on page 3.3-82 of the DEIR/Technical Appendix:

18. *Under Alternative V, the Millbrae Intermodal Station parking structure, the ALRS, and Highway 101 ramps would be incompatible in scale with the Marino Vista and North Millbrae neighborhoods.*

In addition, references to Mitigation Measures 18.1 and 18.2 should read Mitigation Measures 17.1 and 17.2.

47.14. Alternative 6 with the Tunneling options is the only way to go through San Bruno to not wipe out the business and residential areas and affect the traffic any more than you have to.

**Response.** The commentor's support for Alternative VI with a bored tunnel through San Bruno is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (refer to Response 2.7 for a discussion of the LPA selection process). The bored tunnel option was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

47.15. If [the tunnel is] not bored: All Belle Air residents would be impacted by traffic - And this is not addressed in EIR - if you close even one lane of San Bruno Ave ever, (which is included under all of the Alternatives, except tunnel-bore) (3.13-48 [of the DEIR/Technical Appendix]), capacity for that direction would be cut in half....And how will Belle Air elementary school students who cross the tracks at Angus daily be protected. How can their safety be ensured? Or will they be re-routed? This is not specifically addressed. With a bored tunnel, these impacts would not exist....Closing San Mateo Ave, Huntington, or San Bruno Avenue, under any of the plans, might kill downtown.

**Response.** If the bored tunnel option through the City of San Bruno under Alternative VI is not selected, specific mitigations for local impacts will be implemented. Please refer to Response 17.69 for a discussion of provision of parking along Huntington Avenue during construction to mitigate impacts to businesses. Please refer to Response 17.74 for a discussion of access across Angus Avenue during construction. Construction in downtown San Bruno will be performed by the contractor in several stages, as specified by BART, to minimize business disruptions.

Vehicular access across San Bruno Avenue would be maintained during construction through provision of temporary decking. Traffic capacity would be reduced across this roadway during construction of this decking. One-half of San Bruno Avenue would be decked at a time, while the other half remained open to traffic. Once decking is completed on both halves of the roadway, the street would be restored to full traffic capacity. Decking across San Mateo Avenue would also be constructed, although traffic would be rerouted to San Bruno and Huntington Avenues during decking construction. The decking construction for each roadway would take from one to four months to complete, depending upon the extent of utility relocations required.

Temporary pedestrian bridges would be constructed across the excavation at street intersections by the contractor. In the area affected by excavation, pedestrians would be detoured to other bridges until temporary bridges are in place. Temporary pedestrian bridges would have Cal-OSHA-approved hand rails to provide safety for all.

Also, please refer to Response 17.65 for a discussion of construction impacts to traffic in the Huntington Avenue vicinity, and Response 66.195.134 for a discussion of the safety of routes across CalTrain tracks.

- 47.16. Why have you not responded with "Subway" as mitigation to these problems?

**Response.** Please refer to Response 17.68. for a discussion of unmitigable impacts from the subway/bored tunnel option.

- 47.17. How much does tunneling cost in SB? We don't have an idea. Why is this not in the draft? How can you present or attempt to adopt a project with no cost break down.

**Response.** Please refer to Response 17.68 for a discussion of conceptual estimates of tunneling costs.

- 47.18. And where is the money going to come from?....These scare tactics about reverting to the Base Case if local funding is not obtained, are pretty sleazy. Even if the airport kicks in \$200 million, the city of San Bruno cannot raise \$60-75 million or whatever the difference is.

**Response.** Please refer to Response 14.93 for a discussion of the financial plan included in the DEIR/SDEIS and to Response 13.2 for a discussion of estimated capital costs.

- 47.19. What about BART putting in some of its own money? You guys want to do the project, well pay your fair share. The draft says you have on average each weekday 250,000 passengers, paying a minimum of 80 cents a trip. That's at least \$200,000 a day you bring in. That's \$1 million a week. Or about \$50 million a year. You should be willing to invest a little.

**Response.** San Mateo County has not been annexed to the BART District, and BART is prohibited from spending funds outside district boundaries. Ridership of approximately 60,000 trips per weekday in year of opening, spending more than \$1 billion (most of it locally),

creation and sustainment of both construction and operations jobs, reduced highway congestion, and enhanced air quality are considered to be benefits to the people and businesses of San Mateo County.

- 47.20. No one wants the Base Case. Nor most of its configuration. Not Colma, SSF, SB, or Millbrae. Look at the original LPA. SSF doesn't want a Chestnut station. SB doesn't want the heart of town torn up.

**Response.** The commentor's opposition to the Base Case Alternative (Alternative III) is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (refer to Response 2.7 for a discussion of the LPA selection process).

- 47.21. It is hard for me to believe that we would have to spend \$800 million to \$1.2 billion on 6-8 miles of BART tracks to relieve traffic in the North San Mateo County. I would think with that kind of money, we could improve the transit systems we already have and relieve traffic throughout all of the county. And the neighboring counties, too.

**Response.** Funds expended on the BART extension are intended to achieve the following: to relieve traffic congestion in northern San Mateo County; to mitigate, to the degree possible, the impact of increased traffic on Highway 101 related to the projected 72 percent increase in SFIA passengers by the year 2006; to improve air quality in the region; and to provide transit access to jobs, commercial, and recreational sites in three counties. For information on what investment in other transportation systems could achieve throughout the region, please refer to the discussion of the TSM Alternative in the DEIR/Technical Appendix.

- 47.22. We believe the extension of BART farther into our county may not be necessary given the existence of CalTrain.... But, if BART is to extend farther into our county, we oppose all plans that have BART on an aerial structure through town (as in Alternative III.) We oppose all plans that have a downtown station in San Bruno and all plans that call for an end-of-the-line station in San Bruno (as in Alternatives IV, V, V-A, V-B) We also oppose plans with an end-of-the-line station at the San Francisco International Airport, (as in Alternative V-A).... Alternative VI [is the one alternative] that we could live with. This includes a Tanforan Station, a bored-tunnel configuration starting at Euclid and coming up south of Sylvan, and a Millbrae Intermodal Station at Millbrae Avenue as a terminus point.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (refer to Response 2.7 for a discussion of the LPA selection process). A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

- 47.23. If funding...alternative [VI] proves to be a problem, we would support Alternative VI-A, as outlined in a past letter to you and as detailed in the attached document, as a back up plan.

**Response.** If funding proves inadequate for Alternative VI, your support for Alternative VI-A as outlined in your letter is noted.

#### 48. SAN FRANCISCO BAY TRAIL

- 48.1. The bicycle path alignment referred to on page 3-1.6 along the SPTCo/CalTrain corridor should be referenced as the Bay Trail. Although the alignment has not been precisely specified, it would run either parallel to and east of the CalTrain tracks or along the existing service road within the Airport parcel.

**Response.** The San Mateo County Bicycle Map, produced by the San Mateo County Bikeways Committee in 1992, was used to identify bicycle paths in San Mateo County. The bike route identified in the comment was not designated by the map as part of the Bay Trail.

- 48.2. The proposed Airport Intermodal Station (Design Appendix, page 123, fig. 6), [which] shows surface parking, a new entry/exit ramp to Hwy. 101 and an alignment for the Airport Light Rail System (ALRS)...should be addressed in same detail as cumulative effects impacting the [Bay] trail and habitat on the west-of-Bayshore parcel.

**Response.** Impacts to the habitats on the west of Bayshore parcel associated with the placement of an Airport Intermodal Station and associated support facilities on this parcel have been addressed in the DEIR/Technical Appendix. Please refer to Impacts 5, 6 and 9 for the proposed project and its Least-Cost Design Option (pages 3.7-35 to 3.7-40); Impacts 2 and 4 for Alternative II (TSM) (pages 3.7-47 and -48); and Impacts 5, 6, 8 and 9 for Alternative III (Base Case) (pages 3.7-50 and -51).

According to the San Mateo County Bicycle Map, the bicycle route in the vicinity of the proposed Airport Intermodal Station is on San Antonio Avenue to the west of this intermodal station. Under the proposed project, pedestrian and vehicle access to the Airport Intermodal Station would be prohibited from the west and, therefore, bicyclists on San Antonio Avenue would not be affected by any additional traffic. Under the Base Case Alternative, pedestrian access would be allowed from San Antonio Avenue, which would enable kiss-and-ride CalTrain and BART patrons to be informally dropped off on San Antonio Avenue. The number of kiss-and-ride vehicles would not significantly increase traffic congestion on San Antonio Avenue. Parking restrictions would prevent park-and-ride rail patrons from parking on San Antonio Avenue; thus the increase in traffic on this roadway due to the Base Case Alternative would not affect bicyclists.

- 48.3. The proposed relocation of the San Felipe-South Lomita Canal, in the vicinity of the Intermodal Station should also provide for north-south access.

**Response.** It is assumed that the commentator is referring to north-south bicycle access on the west of Bayshore parcel via the San Felipe-South Lomita Canal. Use of a relocated canal for bike path may not be feasible for several reasons. One key reason is that the current canal is open and therefore BART would be required to provide an open channel for replacement. To provide permanent cover over the replacement channel would require coordination with the U.S. Army Corps of Engineers, as this action would be considered "fill" to "waters of the U.S." Any further use of the west of Bayshore parcel for bike path development would require coordination with the property owner, the San Francisco International Airport, and is not considered within the scope of this extension project.

- 48.4. Potential wetland mitigation sites, and a garter snake habitat mitigation site at the southern end of the west-of-Bayshore parcel, adjacent to the Bayside manor subdivision, [are] shown on the mitigation plan (fig. 3.7-5). Access along the existing roadway within the Airport parcel would provide an alternative to an alignment along the railroad tracks, if designed in concert with the proposed mitigation sites.

**Response.** Public access within an area dedicated to the preservation of an endangered species may not represent compatible uses. A permanent north/south barrier within the habitat would restrict movement of the snake from hibernation areas to their breeding areas further east. The USFWS has indicated that one of the existing problems on the west of Bayshore parcel and the preservation of the SFGS at this site is public access. One of the major threats to this species is incidental take from public access to the habitat, including illegal poaching. If public access were to be officially provided through the preservation site, it would be difficult if not impossible to prevent further impacts to the habitat.

#### 49. SAN FRANCISCO PLANNING AND URBAN RESEARCH ASSOCIATION

- 49.1. [San Francisco Planning and Urban Research Association] has long supported transit improvements for the region and San Francisco and recently adopted the attached position paper regarding transit access to the San Francisco International Airport (SPUR Report No. 324).

SPUR urges that any scheme for providing rail transit service to SFO provide for convenient and quick access via CalTrain and the Airport transit system without the necessity of transferring to BART. An external BART/CalTrain station connecting with the airport transit system is one way of accomplishing this end. If, instead, BART is extended into the airport, such access could be accomplished in at least one of the following ways:

- Relocate the CalTrain line adjacent to the proposed BART line into SFO, making the SFO internal station an interchange station between BART, CalTrain, and the Airport transit system.
- Extend the Airport transit system to either the San Bruno Station, the Millbrae Station or a new CalTrain station across the freeway from SFO.

**Response.** The commentor's support for a single intermodal connection among BART, CalTrain, and the ALRS is noted. The 1992 LPA, the TSM, Alternatives III, IV, V, and Design Options V-A and V-B under study in the DEIR/SDEIS provide an intermodal connection between CalTrain and the ALRS, either in San Bruno or Millbrae. Based on the environmental information in the DEIR/SDEIS, direct BART service to the terminal area of the Airport and on a preliminary evaluation of comments received on April 27 and April 28, 1995, the BART and SamTrans boards of Directors selected Alternative VI as the Locally Preferred Alternative.

On June 21 and July 6, 1995 the BART and SamTrans boards directed staff to evaluate aerial design options to Alternative VI as described in Section 1.2, Purpose of this Report in the FRDEIR/S#2DEIS. The FRDEIR/S#2DEIS for the BART-San Francisco Airport Extension was officially released for public comment on October 6, 1995. During the 45-day public comment period approximately 70 letters were received from agencies, organizations and individuals; and 51 persons testified at the public hearing held on November 16, 1995. Based on the environmental information in the FRDEIR/S#2DEIS and on a preliminary evaluation of comments received, the BART and SamTrans boards modified the Alternative VI LPA, from south of Angus Avenue in San Bruno to the end of the tailtracks in Burlingame, to incorporate an aerial design option. This aerial design option, known as the Aerial Design Option LPA, was subsequently adopted by the boards on November 28 and 29, 1995. Alternative VI and the Aerial Design Option LPA the only build alternatives which do not have a direct or CalTrain/ALRS connection. From the north, BART patrons would directly access the new Airport International Terminal under the Aerial Design Option LPA. From the south, CalTrain patrons would transfer to BART at the Millbrae BART/CalTrain Station to access the International Terminal.

MTC projects that all of the BART build alternatives will carry between 18,600 and 18,700 rail patrons to the Airport. The Airport International Station under the Aerial Design Option LPA is forecast by MTC to transport approximately 18,700 riders into and out of the San Francisco Airport while from the external Airport Intermodal Station 18,700 riders will transfer to the ALRS to access the Airport. Of the 18,700 riders to the International Airport Station, two thirds would walk to their final destinations compared to one third that would transfer to the ALRS.

Under the Aerial Design Option LPA, MTC projects that approximately 13,300 passengers would arrive at the Airport from the north and 5,200 would arrive from the south, respectively. Of the total 5,200 patrons arriving from the south by CalTrain at the Millbrae Intermodal Station to ride BART into the Airport, 3,300 would be air passengers and their greeters, and only 1,900 would be Airport employees.

Approximately 75 percent of air passengers who are coming from the south would walk to terminals after exiting BART at the International Terminal Station, and only 25 percent would transfer to the ALRS before reaching their Airport destination located beyond walking distance.

Of the 1,900 employees traveling from the south, approximately 1,200 or 63 percent work at the United Airlines Maintenance Facility or other non-terminal locations and approximately 700 or 37 percent work at the terminals.

Of the 5,200 air passengers/greeters/workers coming from the south by CalTrain and transferring to BART and continuing to the Airport, 35 percent, or approximately 1,900, would make a second transfer onto the ALRS, and 65 percent would walk to their Airport destination once exiting BART. Approximately 10 percent of the total number of daily CalTrain and BART trips to the Airport would be required to make a second transfer. This second transfer would be required for a relatively small percentage of the total CalTrain and BART trips to the Airport.

In addition, please refer to Response 6.4 for discussion of the CalTrain-ALRS connection.

49.2. Since San Francisco, the Joint Powers Board and MTC have all gone on record in favor of a new station at Market Street, it would be a serious omission not to include ridership data based on that contingency.

**Response.** The 1992 AA/DEIR/DEIS by MTC analyzed BART build alternatives with and without the CalTrain downtown extension station at Market and Second Streets. Please refer to Response 11.6 for a discussion of transportation-related impacts of the BART extension with the CalTrain downtown extension.

49.3. On page 2-5 [of the Summary DEIR/SDEIS], Table 2-1 presents the BART service summary which indicates restricted service from 7:00 PM to 12:00 AM and no service from 12:00 AM to 6:00 AM. In light of the fact that the Airport has 30,000 employees, many of whom work at night, the DEIR/SDEIS should discuss the effect of such service levels on Airport employees. The DEIR/SDEIS should also discuss the effects of each alternative on employees.

**Response.** As shown in Table 2-1, the BART extension would maintain the same hours of operation as currently provided on other lines.

There are approximately 35,000 employees at the SFIA. These employees work at the various locations on different shifts around the clock. Approximately 40 percent of these employees work at the terminals and the remaining 60 percent work at other areas, many at the United Airlines

Maintenance facility. Approximately 15 percent of Airport employee shifts begin or end between approximately 12:00 midnight and 4:00 a.m. and would not be able to use BART for their work trip. However, these employee work trips do not occur during peak congestion periods, and the street/freeway system would accommodate these trips as it currently does.

In addition, the commentor is referred to Response 242.6 for additional discussion of work trips on transit to the Airport.

The forecasts of employee trips to SFIA for every alternative analyzed are provided in the DEIR/Technical Appendix. For example, Table 3.1-67, Daily Trips by Mode to the SFIA, in the DEIR/Technical Appendix includes the category "work and other" for BART as well as CalTrain, bus, and auto for Alternative VI. Similar tables are included for all alternatives studied. Please note that the volumes for the BART extension stations are separated into home-based work trips, non-work trips, and air passenger trips in tables included in Appendix B of the DEIR/Technical Appendix for every alternative studied.

- 49.4. The DEIR/DEIS is unclear regarding the operation of the Millbrae Avenue Terminal. In light of the CalTrain connection, how many riders will drive and park, how many will transfer from CalTrain, and how many will stay on CalTrain? It is presently impossible to determine whether the number of parking spaces proposed is adequate.

**Response.** Information on the number of BART patrons accessing the Millbrae Avenue Station by auto under Alternative VI is presented in Table B-40, Alternative VI BART Station Entries and Exits, in Appendix B of the BART extension DEIR/Technical Appendix. Please note that this table has been revised to correct typographical errors; revised Table B-40 follows Response 10.12. These errors did not reflect the numbers used to analyze the transit, traffic, or parking impacts. Transfers between BART and CalTrain are summarized in Table 3.1-7, Daily Intermodal Transfers between Rail Services, in the DEIR/Technical Appendix as well as in individual tables on transfer activity in the Analysis by Alternative portion of the Transit subsection in the Transportation chapter of the DEIR/Technical Appendix.

Please refer to Response 16.137 for a discussion of the ridership impact on northbound CalTrain riders transferring to northbound BART trains.

- 49.5. Pages 3.7-10 [of the DEIR/Technical Appendix] suggest that a CalTrain/ALRS connection west of the Airport will require the taking of[?] nearly one acre of wetland. However, there is no description of the proposed connecting station or explanation why wetland property needs to be used.

**Response.** The CalTrain/ALRS and parking lot would impact approximately 0.83 acres of wetland where the San Felipe-South Lomita Canal would be buried in an underground culvert. The portion of the ALRS west of Highway 101 and the segment serving the CalTrain station is addressed in the DEIR/Technical Appendix in Sections 3.7 and 3.13.10.

The proposed station on the west of Bayshore parcel would be equivalent in size and location to the proposed BART Airport Intermodal Station. A detailed description of the station is not critical to the analyses and conclusions of the DEIR/Technical Appendix.

## **50. SAN FRANCISCO TOMORROW TRANSPORTATION COMMITTEE**

- 50.1. [The BART/SFO Summary DEIR/SDEIS] does not include the CalTrain downtown extension in its analyses. This project is included in MTC Resolution 1876 and is regional transportation policy. Not including it in these analyses is a serious oversight that renders the report defective.

**Response.** Please refer to Response 11.6 for a discussion of transportation-related impacts of the BART extension with the CalTrain downtown extension.

- 50.2. Most of the land acquisition in the station areas is for parking lots. This report should include as a mitigation measure a serious study of transit feeder lines to these stations and other ways of reducing parking requirements and hence, land acquisition. The report states that almost all of the build alternatives reduce the supply of low cost housing in San Bruno and San Mateo County. Changing the emphasis in station design from auto access to transit access would reduce this impact.

**Response.** Parking requirements are based on MTC's mode choice model as required by FTA. Assumptions used in the model are based on the best available information from the transit systems, Caltrans, and local transportation agencies. The provision of additional transit services to BART would not change mode choice decisions as forecast by MTC's model. Please refer to Response 17.45 for further discussion of the provision of transit service to the end-of-line BART station.

- 50.3. It appears that impacts such as the removal of housing and businesses (i.e. - jobs) have been glossed over in this report.

**Response.** A conservative estimate of the number of displaced units and jobs was derived by assuming a maximum amount of land acquisition. This information is presented in tabular and graphic form to convey the magnitude and location of the displacement. In each instance of housing and/or business loss, the DEIR/Technical Appendix acknowledges it as a significant adverse impact. Furthermore, even though mitigation is proposed to offset the cost of relocation, the DEIR/Technical Appendix explains that the social and psychological hardship remains, and concludes that the impact would remain significant even after implementation of the proposed mitigation. Consequently, the document does not gloss over the effects of land acquisition and displacement.

## **51. SAN MATEO COUNTY CENTRAL LABOR COUNCIL**

- 51.1. We are writing to express our support of the BART extension on the peninsula.

**Response.** The commentator's general support for the BART extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. The Alternative VI Aerial Design Option was selected as the LPA by both boards (refer to Response 2.7 for a discussion of the LPA selection process).

## **52. SAN MATEO COUNTY ECONOMIC DEVELOPMENT ASSOCIATION**

- 52.1. San Mateo County Economic Development Association (SAMCEDA)...restates and continues its support of the extension of BART to the San Francisco Airport vicinity, and believes that if the criteria set forth are met that the best extension alternative will be selected and implemented.

**Response.** The commentor's general support for the BART extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. The Alternative VI Aerial Design Option was selected as the LPA by both boards (refer to Response 2.7 for a discussion of the LPA selection process).

52.2. What assurances do the residents of San Mateo County have that the decision makers will guarantee a total funding commitment is in place prior to proceeding with the project?

**Response.** The FTA, FAA, State of California, MTC, San Mateo County, SFIA, BART, and all other involved parties will be in agreement on the project's resources before the project proceeds. Please refer to Responses 14.93 and 30.35.

52.3. How will the 27.6 to 35.3 million per year operations and maintenance costs be distributed? What funding sources are in place in San Mateo County to insure this will not become another taxpayer's burden?

**Response.** Per the proposed amendments to the BART/SamTrans Comprehensive Agreement pertaining to the BART extension, operations and maintenance costs for the extension will be the responsibility of SamTrans. Refer to Chapter 6 of the DEIR/Technical Appendix as well as the Financial Analysis, Volume I of this document, for a discussion of operations and maintenance costs.

52.4. Nearly all BART stations currently in operation have insufficient parking and the DEIR/SDEIS projects similar results for new stations....Why are larger parking facilities not proposed to minimize or eliminate these impacts?

**Response.** Estimates of the number of parking spaces required at each BART station were derived from the MTC traffic model and refined by employing a sub-area traffic model of central and northern San Mateo County developed for this study. This model uses MTC regional BART patronage projections to derive the number of persons driving to each existing and future BART station. The parking demand would be highest in 2010 compared to 1998 and 2000; therefore, the impact analysis and required mitigation measures are performed for 2010, when the adverse effects from parking demand would be greatest.

Mitigation measures are included where demand exceeds the capacity of the initial station parking designs. These mitigation measures include larger parking facilities and would minimize the impacts from spillover parking into adjacent streets. Parking lots at BART stations along the extension were designed for an average day plus a 10 to 20 percent reserve for days that exceeded the average. Federal Transit Administration requirements prevent BART from constructing larger-than-needed parking facilities. Please also refer to Response 14.25 for a discussion of BART's current parking capacity.

52.5. What type of assistance would be afforded to those businesses which are displaced by the extension project? What assistance will be provided to those businesses with diminished access and/or visibility as a result of the ensuing construction and/or the completion of the extension?

**Response.** An array of services, such as provision of information regarding relocation rights and assistance in processing relocation payment claims, will be provided to businesses subject to relocation. The types of assistance to be provided are described in detail in the relocation plan (Volume V of this document). Every effort will be made to minimize diminished access and/or

visibility; however, in certain instances this type of disruption would be unavoidable. BART/SamTrans would address demonstrable loss of income to business in accordance with state and federal relocation laws.

- 52.6. Have the revenue reductions to the local municipalities been quantified due to the displacement of residents and businesses?

**Response.** It is not possible to determine fiscal impacts to the local municipalities with any degree of accuracy. There will be positive and negative changes in municipal expenses as well as revenues. While some property would be lost from the assessment rolls, cities would lose property tax revenues, and also be relieved of the obligation of providing services to these properties. Businesses may relocate into other cities, hence sales tax revenues could be affected. However, given present retail vacancy rates, there would be opportunities to relocate within the same city. Please refer to Response 17.75 regarding the Bay Area Economics Study and the potential for sales tax gains.

- 52.7. Given the high cost of conducting business within San Mateo county, what additional impacts may be passed on to the community as a result of the expansion projects' initial construction and long term operations and maintenance aspects?

**Response.** Through the direct and multiplier effect (secondary jobs), there would be both short-term and long-term jobs created in the construction and on-going operations and maintenance aspects of the BART extension. These jobs will generate income which in turn would be spent in the community, creating the positive economic multiplier effects.

### 53. SAN MATEO COUNTY RESTAURANT & HOTEL ASSOCIATION

- 53.1. The Association...[is] against any alternative that would unreasonably delay the expansion of the International Terminal at San Francisco International Airport and/or hinder hotel curbside access to the Airport for arriving and departing airport hotel guests.

**Response.** BART and SamTrans staff associated with the BART extension have in the past and will continue in the future to work closely with the staff of SFIA to ensure that the SFIA Master Plan improvements are not delayed by this extension. Please refer to Response 24.28 for a discussion of traffic impacts to SFIA access and egress ramps during construction of the BART extension.

### 54. SIERRA CLUB

- 54.1. This statement by BART about why a light rail alternative (proposed Alternative #13) was not considered is ludicrous and convoluted. The criteria established by BART are biased in favor of a BART build alternative and effectively preclude non-BART alternatives. From the documents available, we cannot determine what public process was involved in selecting the threshold criteria.

**Response.** The Light Rail Transit from the Colma BART Station via El Camino Real to I-380 LRT/CalTrain/ALRS Intermodal Station was evaluated in the screening process and documented as proposed Alternative 13 in the BART-San Francisco Airport Extension Screening of Alternatives Report, August 1993. Proposed Alternative 13 did not accommodate a BART/CalTrain intermodal connection, which was one of the threshold criteria required for an alternative to be considered further in the Screening Report. Providing a BART/CalTrain intermodal connection has been a cornerstone and integral part of all build alternatives evaluated in

the Alternatives Analysis conducted by MTC and in the DEIR/SDEIS. In order to maintain and enhance existing and proposed commuter service, it is necessary to offer a connection between BART and CalTrain at an intermodal station. The ability to transfer between BART and CalTrain improves the regional transit system, provides additional mobility for transit dependents and enhances transit access to the region for residents of San Mateo County.

Because Alternative 13 did not satisfy the threshold criteria for a BART/CalTrain intermodal connection, staff recommended its elimination to the local agency Advisory Committee and Steering Committee. In addition to not satisfying the threshold criteria, proposed Alternative 13 had several other serious flaws, which are described in Response 54.12.

An overview of the alternatives selection process is presented on pages 2-99 to 2-112 of the DEIR/Technical Appendix. The following paragraphs highlight and expand upon the screening process that is being questioned.

The process for screening proposed alternatives was first presented to the public at the Public Scoping Meeting, held July 8, 1993 at the South San Francisco Conference Center. At the Scoping Meeting, Mr. Thomas Margo, Assistant General Manager of BART Development, informed the public of the screening process, the intention to review preliminary staff recommendations with corridor cities, and the opportunity for public input at upcoming Advisory and Steering Committee meetings.

To implement the screening process, a technical working committee was formed consisting of staff from both BART and SamTrans, along with members of the engineering and environmental consultant teams. The committee consisted of planners, environmentalists, engineers, and operations specialists. Each of the committee members was chosen because of his/her knowledge of the project and respective areas of expertise. The first task of the committee was to approve the criteria to be used for the evaluations. The list of criteria was divided into two categories: threshold criteria, which were based on the project objectives and were required to be met for an alternative to be carried forward; and comparative criteria, which were used to compare alternatives against one another. The screening criteria used are shown in Table 2.5-1 of the DEIR/Technical Appendix.

Project staff were responsible for gathering information on all proposed alternatives to be used in the screening process. This information was based, where applicable, on information developed from previous studies. Where the necessary information did not exist, staff performed an initial planning and engineering analysis so that sufficient data were available for the screening. Meetings were held with members of the affected agencies to clarify the components of the proposed alternatives, resulting in clarifications for existing proposals and the addition of two new alternatives.

When the committee met to analyze the alternatives, each alternative was described and basic data presented. This was followed by an evaluation and determination by the group of whether each alternative satisfied the threshold criteria. If an alternative did not satisfy the project objectives embodied in the threshold criteria, it was deleted from further consideration. If an alternative met all of the threshold criteria, it was analyzed further by the committee using the comparative criteria. This report contains the discussion materials used by the committee. The level of detail provided by each proposer varied for each alternative. Some alternatives, such as proposed Alternative 9, were more thoroughly defined, whereas others, such as Alternative 15, provided only a general description of a portion of an alignment.

After the committee completed its work, an additional series of meetings were held with MTC staff and each of the four local communities within the project corridor to discuss the findings of the screening process and to obtain input from local planners on the proposed set of alternatives. There was basic agreement from the local communities and MTC on the alternatives to be carried forward for the more detailed study necessary to produce the DEIR/SDEIS. At the meetings with the representing staff and elected officials from the cities within the project corridor and MTC, no one recommended that proposed Alternative 13 be considered for further study, nor did they question the screening criteria.

The recommended alternatives and screening criteria were presented at both the Advisory and Steering Committee public meetings on August 20, 1993. Ms. Joan Kugler of BART described the goals and methodology of the screening process. Ms. Kugler also presented and discussed the criteria used to arrive at the recommended alternatives. Of the 20 alternatives considered in the Screening Report, six were recommended for further study, and 14, including proposed Alternative 13, were recommended for elimination. The Advisory Committee for the DEIR/SDEIS was composed of two elected officials from each of the four affected communities and two commissioners from MTC. The Advisory Committee recommended that the Steering Committee approve the recommendations and also consider 1) the Seventh Avenue/CalTrain relocation and 2) a modified Colma Creek alignment in South San Francisco. Following the Advisory Committee meeting, the criteria for screening and the list of alternatives recommended for rejection and for further study by the Advisory Committee were presented to the project Steering Committee. On August 20, 1993, the Steering Committee (composed of four members of the BART Board and the SamTrans Board) voted 5 to 0 to accept the recommendations. No member of either the Advisory or Steering Committee objected to the screening criteria or advocated that proposed Alternative 13 be studied.

54.2. Many peninsula residents travel to/from San Francisco State University and the Stonestown area. The present public transit system requires several transfers and is rather inconvenient. The proposed BART extension project will not help these people. Improved bus service between southwest San Francisco and CalTrain, in conjunction with upgraded CalTrain service, will make transit in this corridor a more feasible option.

**Response.** Many Peninsula residents travel to/from San Francisco State and the Stonestown area, and trips require several transfers on public transit. The proposed alternatives in the DEIR/SDEIS do not address this market. The corridor selected for study in the AA/DEIS/DEIR and the DEIR/SDEIS is from Colma to the vicinity of San Francisco Airport.

Under the FTA's Major Capital Investment Planning Process, a Phase I - Systems Planning Study established the corridor where an alternatives analysis would be performed. A Phase II - Alternatives Analysis Study evaluated a specific corridor. In 1984 and 1985, a systems planning study was conducted by MTC to evaluate various transportation alternatives in a large corridor between San Francisco and San Jose. The study, the 1985 SCR 74 Peninsula Mass Transit Study, was conducted at the request of the California State Legislature. The Peninsula Mass Transit Study met the Urban Mass Transit Administration's (UMTA, the predecessor to the FTA) requirements for a "systems level" analysis. In May 1990, the UMTA approved the initiation of a Phase II Alternatives Analysis study within the Daly City to SFIA corridor. The DEIR/SDEIS is a continuation of the AA/DEIS/DEIR study; thus, alternatives for consideration must be within the Daly City to SFIA corridor. The commentor is suggesting another corridor for evaluation, which would need to be the topic of another study.

54.3. We believe the present BART DEIR/SDEIS does not adequately analyze low-impact BART alternatives such as terminating BART at Tanforan and connecting with the Airport Light Rail System along I-380 and over Hwy 101.

**Response.** Depending on the configuration of the alignment north of Tanforan, an end-of-line Tanforan station could have significant impacts. If this alternative follows the LPA alignment north of the Tanforan Station, it would have the impacts identified in the DEIR/SDEIS.

In the San Bruno area, such an alternative, as suggested, is likely to raise the following concerns: 1) a joint BART/CalTrain connection would not be possible without relocating a portion of or fragmenting the Fifth Addition or Belle Air neighborhoods; 2) the City of San Bruno and the Tanforan Park Shopping Center have opposed an end-of-line BART station at Tanforan; 3) the Fifth Addition and Belle Air neighborhoods have opposed a 3,000 +/- parking space transit station in the vicinity of Tanforan; 4) since this station would provide regional access for commuters from the south, there may be significant end-of-line traffic impacts at the I-380 San Bruno Station; 5) an at-grade BART railtrack would extend approximately 4,000 feet south of the Tanforan area into downtown San Bruno, creating visual, noise, and vibration impacts and physically separating the Belle Air neighborhood from downtown San Bruno; and 6) the alternative would not meet the objective of getting passengers and Airport employees close to the the Airport terminals. Functionally, the 2.6-mile connection to the Airport terminal area via the Airport Light Rail System is a very poor connection.

54.4. The DEIR/SDEIS does not discuss the extension of CalTrain to downtown San Francisco and its synergistic benefits. What happened to the "B" alternatives of the previous study? Also, the 1991 MTC "Patronage Forecast Results" for the BART-SFO extension opens with this statement: "The TSM improvements add more new transit riders (compared with no-project), than do the BART extensions past Colma (compared with TSM)." Please verify that this statement is still correct and, if it is, please elaborate on this most interesting point.

**Response.** Please refer to Response 11.6 for a discussion of transportation-related impacts of the BART extension with the CalTrain downtown extension.

According to Table 4.6, Regional Transit Person Trips (Linked Trips), in the AA/DEIS/DEIR, the No Build Alternative in 2010 would have 1,267,500 transit trips; the TSM Alternative without the CalTrain downtown extension would have 1,283,400; the TSM Alternative with the CalTrain downtown extension would have 1,288,400; the Base Case Alternative without the CalTrain downtown extension would have 1,294,200; and the Base Case Alternative with the CalTrain downtown extension would have 1,298,100. This table is based on the BART-SFO AA Patronage Forecasts released by MTC in May 1991. As this table shows, the TSM Alternative with the downtown extension (a "B" Alternative) increase linked transit trips by 20,900 trips, while the Base Case Alternative without the downtown extension would increase linked transit trips by 26,700.

54.5. \$41,000 per new rider! That compares with about \$15,000 per new rider for the CalTrain extension and upgrade program. How can the Colma-SFO project be justified if these numbers are correct?

**Response.** The source of the commentator's figures of \$15,000 and \$41,000 per new transit rider is not clear. These figures do not appear in any of the environmental documents related to the BART-San Francisco International Airport extension, and no source is noted in the commentator's letter.

The cost effectiveness index (CEI) is the appropriate measure of cost per new transit rider, and the formula is defined for all projects by FTA. The CEI for the BART-San Francisco International Airport extension alternatives range from \$19.41 for Design Option V-B to \$29.57 for Design Option V-A. The commentor is referred to the environmental documents being prepared by the Joint Powers Board on the CalTrain Extension to downtown San Francisco for that project's cost effectiveness indices.

- 54.6. The Sierra Club opposes all BART alternatives that impact the wetlands west of Highway 101- even with so-called "replacements."

**Response.** Development of alternatives and subsequent screening of those alternatives has included efforts to avoid wetlands in the vicinity of the west of Bayshore property. BART has considered loss of U.S. Army Corps of Engineers jurisdictional areas (including wetlands) in the evaluation of alternatives. BART has conferred with resource agencies in an effort to develop replacement wetlands at a quality and scale that provides compensation for reduction of U.S. Army Corps of Engineers jurisdictional areas. In general, informal consultation with resource agencies has indicated that there is no build alternative presented in the DEIR/SDEIS which avoids all impacts to endangered species habitat. Please also refer to Response 2.7 for a discussion of the alternative selection process.

- 54.7. Most of the information in this report was gathered during the drought years and must be re-evaluated for a wet season....The Sierra Club believes that the stewardship of this wetland habitat would be better left with nature and not with BART.

**Response.** Please refer to Response 24.59 for discussion on suitability of field surveys. Wetland delineation was performed in conjunction with and approved by the U.S. Army Corps of Engineers.

- 54.8. The construction impacts on wildlife, depending on alignment and construction method, are not made clear or mitigated adequately.

**Response.** Construction impacts on wildlife and mitigation are discussed at Section 3.13.10 of the DEIR/Technical Appendix. These measures are sufficient in providing decision-makers with a clear picture of the relative impacts of each alternative and the mitigation measures necessary to reduce or minimize these impacts.

- 54.9. The technical reports were not widely available and are not summarized well in the main document. The reader is overwhelmed by a mountain of unimportant and incorrect data, while useful and necessary information is buried.

**Response.** As noted on page 3-5 of the DEIR/Technical Appendix, the technical reports were available for public review at BART's Oakland office. These reports are not required to have the same wide distribution as the DEIR/SDEIS or DEIR/Technical Appendix. The technical reports are adequately summarized and characterized in the main documents. Please refer to Response 3.13 for discussion of the necessary length for the documents.

- 54.10. Since this BART-SFO study began, additional shuttle services between Daly City BART and SFIA, and between Millbrae CalTrain and SFIA, have started and provide key connections in the project study corridor. Performance of these routes should be discussed and perhaps should be the new baseline to judge the alternatives against.

**Response.** The No Build Alternative includes SamTrans Route 3B, a non-express bus route serving the transit market between Daly City and the SFIA. This bus route also provides connections to the Millbrae CalTrain Station. The TSM Alternative includes a Colma BART Station to SFIA express bus connection and a new CalTrain station with direct connection to the Airport via the ALRS. The additional bus service from Colma to SFIA under the TSM Alternative is approximately equivalent to the additional bus service discussed in the comment, while the CalTrain connection to the ALRS under the TSM Alternative would be slightly superior than the bus shuttle service from the Millbrae CalTrain Station. The effect of these services are included in the overall patronage results for the alternatives in question. Comparison of the trips to SFIA by bus and CalTrain in Table 3.1-6, Daily Trips by Mode to SFIA, in the Summary DEIR/SDEIS provides the approximate impact of the additional transit services described in the comment.

- 54.11. The Sierra Club strongly believes there should be NO impacts on the three endangered species on the 115-acre parcel west of Highway 101. We are extremely concerned about the impact any construction will have on this land. We request that alternatives be considered that would have no impact on this sensitive area.

**Response.** A wide variety of project alternatives have been considered in the DEIR/SDEIS as well as during previous planning efforts by the FTA and MTC. The project alternatives presented in the DEIR/SDEIS were selected for further study because they were the most practicable, feasible, and/or had the least environmental impacts. Of the alternatives presented in the DEIR/SDEIS, Alternative VI with the tunnel boring from the Millbrae Station would avoid the entire west of Bayshore parcel. However, this alternative has some potential to minimally impact the endangered San Francisco garter snake (SFGS) during construction of the northern tunnel portal and track alignment north of Cupid Row Canal to the existing San Bruno CalTrain Station. There appear to be no practicable and feasible alternatives to connect BART to Millbrae or the Airport that would not impact the SFGS. Construction of the BART tracks in the area immediately north of the west of Bayshore parcel would require the removal (burial) or realignment of an existing north-south running drainage ditch that flows into Cupid Row Canal. Although this small drainage ditch 7' x 570' is considered to be of limited habitat value to the SFGS, it has the potential to attract and support snakes as a feeding area for a short period of the year during which this ditch is carrying flowing water.

A second type of construction impact in this area would consist of potential disturbances to the SFGS's use of adjacent areas as breeding or feeding habitat, due to construction noise. The SFGS is a skittish snake and may abandon frequently disturbed habitats. Under existing conditions, the disturbance relative to tunneling from the Millbrae Station for Alternative VI may be limited to those portions of Cupid Row Canal that support freshwater habitats and to the upland habitats in the immediate area. There are no practicable and feasible alternatives that would not impact the SFGS. Suitable mitigation measures for these limited impacts are currently being developed in consultation with the USFWS.

Please also refer to Response 107.9 for a discussion of the project's goal of minimizing adverse impacts to natural resources.

- 54.12. We request that a Light Rail line be considered that would connect the Colma BART terminal with the airport. One possible route for this line would be to run surface down El Camino and the old 40-Line tracks with a Light Rail/CalTrain/People-Mover Intermodal station in the vicinity of I-380 and the CalTrain tracks. The Airport "People-Mover" would connect the Intermodal station with the Airport terminals and maintenance facilities.

**Response.** The alternative the commentor is referring to is a Light Rail Transit (LRT) system from the future Colma BART Station to a proposed Light Rail/CalTrain/Airport Light Rail Station in the vicinity of I-380. This alternative was proposed by the Sierra Club during the DEIR/SDEIS scoping process and evaluated as proposed Alternative 13 in the Screening of Alternatives Report, August 1993.

A description of this alternative follows. South of the Colma Station, the LRT would operate at grade in the median of Mission Road/EI Camino Real, with grade crossing protection. From EI Camino Real and Mission Road, the alignment would follow the former Market Street Railway 40 line interurban right-of-way, parallel to the SPTCo right-of-way, to a Light Rail/CalTrain/Airport Light Rail Intermodal Station in the vicinity of I-380. An Airport Light Rail System, constructed and operated by the airport, would connect the intermodal station with airport terminals and employment sites. Under this alternative, the existing San Bruno CalTrain Station would be relocated approximately one mile north, near I-380.

This proposed alternative was eliminated from further study during the screening process because it failed to meet the threshold criteria of providing a BART/CalTrain intermodal connection. Please refer to Response 54.1 for further discussion of the rejection of Alternative 13 during the screening process. In addition, there were other reasons this proposed alternative was not considered practical and feasible. These reasons are briefly presented in the following paragraphs.

Colma and South San Francisco have consistently opposed a below-grade, open, retained cut BART alignment in this corridor. An at-grade light rail system would likely have greater visual and noise impacts than a retained cut BART alignment. Additionally, an at-grade LRT would introduce conflicts with street traffic that a BART grade-separated alignment would avoid. An at-grade LRT would also introduce land use incompatibilities with the cemeteries in Colma.

In addition to the above impacts, the LRT alternative would require many patrons to make more than one transfer to reach their final destination. These additional transfers would not be required for the BART alternatives presented in the DEIR/SDEIS. These additional transfers would be inconvenient and would decrease transit patronage. As an example, a patron traveling on BART from San Francisco would need to transfer twice to get to the airport, once from BART to the LRT, and a second time from the LRT to the Airport Light Rail System. A transfer between BART and the LRT would be required for rail commuters from San Bruno or South San Francisco traveling to/from downtown San Francisco. This transfer is not required for the BART alternatives.

For the above reasons, this proposed alternative is considered impracticable and infeasible.

- 54.13. Most people don't realize that SamTrans would put at least \$400 million into this BART extension. Unless SamTrans cuts back on existing bus service and CalTrain contributions, it is highly unlikely that SamTrans will have enough money for both capital and operating costs of this BART extension.

**Response.** Please refer to Response 10.1 for a discussion of SamTrans' participation in the project.

- 54.14. Most people don't realize that the present BART plans are to terminate the three BART lines at Colma and for only one to continue on to the airport. That means that passengers on two of the lines would have to get off at Colma and transfer to another train to get to the airport.

**Response.** The BART operations plan is described on pages 2-21 and 2-23 of the DEIR/Technical Appendix. The current conceptual operating plan has one Transbay line terminating at Daly City and two Transbay lines continuing on to Colma and serving the Airport extension stations. For all of the proposed BART alternatives, it was assumed for patronage forecasting purposes that the Concord and Fremont Transbay routes would serve the new San Francisco Airport extension stations, and the Richmond Transbay route would terminate at the Daly City Station.

Richmond line Transbay patrons traveling south of the Daly City Station would need to transfer to either a following Concord or Fremont Transbay train to get to their destination. The average wait time for the next train traveling south of Daly City would be 4-1/2 minutes peak and 7-1/2 minutes midday during weekdays.

On Saturdays, Sundays, and early morning and late evening/night weekdays, BART provides an "X" service pattern. During these time periods, service is offered from Concord to the end-of-line West Bay station and between Richmond and Fremont. The Richmond/Transbay and the Fremont/Transbay routes are not in service, and patrons from the Richmond/Fremont route would need to transfer at the MacArthur, 12th Street, or 19th Street BART Stations for a Transbay trip.

54.15. CalTrain upgrade alternatives were discarded unfairly following a biased cost comparison, and no analysis was done on light rail or CalTrain branch alternatives in the project area....On the basis that these reasonable alternatives were excluded from consideration, we believe the DEIS/DEIR is deficient. All reasonable alternatives should be included, and adequate justification for excluding these alternatives was not provided.

**Response.** The CalTrain extension to downtown San Francisco was evaluated in the AA/DEIS/DEIR. The extension of CalTrain and upgrades, including electrification, was also the topic of the CalTrain San Francisco Downtown Extension/System Upgrades Final Report, March 1994. The CalTrain extension is an active proposal. At the conclusion of the March 1994 study, the Peninsula Corridor Joint Powers Board, in Resolution No. 1994-8, selected Alternative 8B-Surface/Subway to Market and Beale with electrification of CalTrain as the CalTrain Locally Preferred Alternative. This LPA and other CalTrain alternatives will soon be under study in a separate Draft EIS/EIR.

An analysis of an LRT from the future Colma BART Station to the Light Rail/CalTrain/Airport Light Rail Station in the vicinity of I-380 was evaluated and rejected from further consideration in the screening process. Please refer to Responses 54.1 and 54.12 for discussion on this proposed alternative and the alternatives screening process.

A CalTrain branch line to Colma BART, which would use the San Bruno branch line to connect CalTrain to BART at Colma, was proposed and evaluated during the scoping process for the AA/DEIR/DEIS study in 1990. During this process, MTC evaluated and eliminated this proposal from further analysis for the following reasons, as described on page 2-101 of the DEIR/Technical Appendix:

- This alternative would not provide frequent SFIA service or good access to BART for northern San Mateo County riders.
- Service would create two transfers for air travelers coming to the SFIA via BART.
- Residential impacts could be severe due to noise and diesel exhaust.

- 54.16. With regard to purpose and need, no reference is made to the agreement between SamTrans and BART regarding funding for East Bay extensions. Clearly, there is great consideration being given to this agreement, and, therefore, funding of the East Bay BART extensions should be considered a purpose of this proposed project.

**Response.** The SamTrans contribution of funding to the airport extension is considered to be a "buy-in" to the existing three-county system, allowing residents of San Mateo County direct rapid rail access to all regions served by BART, not just the four new stations along the BART extension route. The transfer of funds from the airport and Colma extensions to the East Bay extensions is made only, when state funds are made available to the West Bay extensions. Therefore, SamTrans is not increasing its participation in BART's extensions program by transferring funds to the East Bay projects; instead, the extensions program is being augmented by state funds.

- 54.17. How does a BART extension help an air traveler from Marin County? Or a UAL or SamTrans North Base maintenance worker living in East Palo Alto or San Francisco's Bayview District? These are legitimate transportation needs that other alternatives could better meet if considered. The description of the Project Study Corridor in Figure 1.1 and 1.2 is too narrow and limiting to allow this.

**Response.** The BART extension does not provide direct service for air travelers from Marin County, or UAL and SamTrans North Base maintenance workers living in East Palo Alto or the San Francisco Bayview District. These are legitimate transportation needs; however, selection of the Colma to San Francisco Airport corridor as the corridor for study in the AA/DEIS/DEIR was the result of an extensive planning process.

As explained in Response 54.2, under the FTA's Major Capital Investment Planning Process, a Phase I - Systems Planning Study established a corridor where an Alternatives Analysis would be performed. A Phase II - Alternatives Analysis Study evaluated a specific corridor. The corridor selection process began with the 1985 Peninsula Mass Transit Study, which evaluated various transportation alternatives in a larger corridor between San Francisco and San Jose.

In March 1989, the MTC entered into a planning process with the Urban Mass Transportation Administration (UMTA, now the Federal Transit Administration) to "pre-screen" mass transit alternatives on the Peninsula that could be advanced to an alternatives analysis. The resultant *BART San Francisco Airport Extension/CalTrain Upgrade Pre-Alternatives Analysis/DEIS* evaluated six alternatives: 1) No Build; 2) TSM; 3) a BART extension to an external Airport station; 4) an upgrade of CalTrain; 5) light rail transit from San Francisco to San Jose; and 6) an extension of BART to an internal Airport station. The MTC recommended that Alternatives 4, 5, and 6 be dropped from further consideration for one or more of the following reasons: cost effectiveness, financial infeasibility, and/or lack of a project sponsor. Therefore, the pre-screening of alternatives concluded that BART was the preferred mode and that the Colma to SFIA Southern Pacific San Bruno branch railroad right-of-way was the preferred corridor for further study.

In May 1990, UMTA approved the initiation of a Phase II - Alternatives Analysis Study for the No Build, TSM, and BART Alternatives within the Colma to SFIA corridor. The DEIR/SDEIS is a continuation of the AA/DEIS/DEIR study; and, thus, alternatives being evaluated are those within the Colma to SFIA corridor.

- 54.18. Reference to previous approvals by San Mateo County voters should clarify that project costs and other considerations were not known or explained at the time and, therefore, that public approval cannot be considered conclusive. In any event, the last such vote was almost five years ago, and

changed circumstances exist now which might result in a significantly different public vote if put to voters today, particularly if other alternatives to a BART extension were offered.

**Response.** In November 1985, the electorate of San Mateo County approved ballot Measure A by a 73 percent vote. Measure A authorized SamTrans to fund the construction of a passenger station in unincorporated Colma and to contract with BART for the extension of service to this facility. The vote was a strong affirmation of the public's concern over the area's transportation problems, including limited access to the Daly City BART Station and increasing commuter traffic.

In November 1987, San Mateo County voters approved Measure K, which permitted the use of SamTrans funds for a BART extension beyond Colma to San Francisco International Airport. This reflected the general public's approval for a BART extension to SFOIA. All alternatives include stations within a convenient distance to provide shuttle service to the development east of US 101.

The measure read, "Shall the San Mateo County Transit District be authorized to construct BART passenger stations and related facilities south of the proposed Colma station and at a location near the San Francisco Airport?" The impartial analysis of Measure K in the voters' pamphlet by the District Attorney noted that "the measure does not specify the exact locations of the proposed passenger stations and related facilities." The voters' pamphlet argument in favor of Measure K did, however, indicate that the proposed extension would follow the Southern Pacific San Bruno branch right-of-way and include passenger stations at Chestnut Avenue, near Tanforan Shopping Center and Airport external. It also stated that "this alignment would not impact any homes or commercial properties."

As further testimony of support for a BART extension, San Mateo County, in 1992, showed support for a BART extension to San Francisco Airport by passing Measure B, an advisory vote, by 75 percent.

New information, evaluation of new alternatives, and environmental analysis has been conducted since the 1985 and 1987 elections. Since the November 1985 election, an AA/DEIS/DEIR and Final EIS/EIR on the Colma BART extension and a Colma project has been adopted and is under construction. Similarly, since the November 1987 election, an AA/DEIS/DEIR and DEIR/SDEIS have been prepared with new alternatives and cost estimates. These documents describe the impacts of the alternatives that are currently being considered by BART.

Alternative VI and its Aerial Design Option LPA both include a BART/CalTrain intermodal station at Millbrae Avenue. The Aerial Design Option LPA has the benefit of a Millbrae Avenue Station, serving both the local Millbrae/Burlingame catchment area and commuters from the south via Highway 101, and provides stations at Tanforan and Hickey between Highway 101 and I-280 near the center of mass in the Cities of San Bruno and South San Francisco. The Tanforan Station, located near I-380, has the benefit of providing an alternative station for commuters from either Highway 101 or I-280.

- 54.19. Diverting...[San Bruno rail freight service] traffic would result in more long distance truck movements, higher energy consumption, and attendant air pollution impacts both in the Bay Area and beyond. The diversion of this traffic would also make the economics of rail freight to the Peninsula and San Francisco less attractive and make further rail freight service abandonments more likely.

**Response.** This comment refers to the abandonment of freight rail service on the San Bruno branch that currently serves the Macy's warehouse with an average of 4 rail cars per month. SPTCo has abandoned freight service on the San Bruno rail line.

- 54.20. No estimates are given of actual [endangered species] population reductions which would result from the proposed alternatives. There is no analysis of the effects of local population reduction on the overall viability of the endangered species.

**Response.** It is not possible to accurately estimate the expected reduction of the three sensitive species populations for each alternative, though any reduction of an endangered species population is considered significant for purposes of this analysis.

The proposed project alternatives are not expected to eliminate any local populations of the San Francisco forktail damselfly or the California red-legged frog. Of greater threat to the red-legged frog on the west of Bayshore parcel is the presence of bullfrogs throughout the site. Populations of the San Francisco forktail damselfly are scattered throughout the parcel, and the elimination of any single population would not necessarily mean that the species would be eliminated from the site. Trespassing, poaching, loss of prey species due to increased competition with bullfrogs, loss of habitat, and drought have all contributed to San Francisco garter snake (SFGS) decline in the west of Bayshore parcel. The BART project may contribute to or hasten this decline. The population could also continue to decline without the BART project because of continued degradation of habitat. The loss of the west of Bayshore parcel SFGS population would result in the loss of one of the remaining six known populations in existence, and may represent the loss of genetic variation. Extinction of this population would not represent the eventual extinction of the species, but could contribute to the extinction of the species.

- 54.21. The effect of vegetation removal, especially mature trees, on wildlife throughout the project area is inadequate. There is no analysis of the effect of vegetation and wetland removal on migratory birds, especially waterfowl.

**Response.** As noted in the discussion of Significance Criteria and Methodology, those impacts that would be considered significant do not include loss of mature trees and associated wildlife, for the following reasons:

- None of the trees support any state or federal threatened or endangered species.
- None of the trees are considered to represent an undisturbed or restricted biological community. These trees are, in fact, more representative of altered communities common to urbanized areas.
- None of the trees are recognized by the scientific community as having important scientific interest, or being of unusual variation and geographical limits.

Impacts or loss of wetland at any given site along the alignment is significantly less than one acre, and the total for all sites is not more than a maximum of two acres. The sites along the alignment where impacts would occur are mainly included within two areas: Colma Creek, a concrete-lined channel; and the west of Bayshore parcel. Impacts to these two areas would not represent significant loss of water fowl habitat because the wetlands within these two areas are not considered high-quality habitat for waterfowl use.

- 54.22. No reference is made to the ongoing U.S. Geological Survey study of the aquifer underlying Colma Creek. It is our understanding that this aquifer may extend from Lake Merced to the vicinity of SFO, and that its characteristics are not fully known. Rechanneling, culverting, and

reducing natural drainage and groundwater recharge opportunities must be considered only as a last resort.

**Response.** The U.S. Geological Survey is conducting an ongoing study of the aquifers in the upper San Francisco Peninsula area and, in addition, the City of San Francisco is conducting a study as part of its Clean Water Program. The analysis indicates that a majority of the recharge opportunities are not located in urbanized areas, but in the undeveloped foothills. Any loss of recharge opportunities due to localized rechanneling or culverting would affect a very small percentage of the total recharge potential of the basin.

- 54.23. How would a 100-year flood be dealt with? What are the likely long-term impacts to Colma Creek due to the anticipated BART construction?

**Response.** A 100-year storm event would cause localized flooding in the Colma Creek area. If additional storm drainage improvements are not constructed, the area would continue to be subject to localized flooding. As stated in the DEIR/SDEIS, the construction of the BART extension may cause some increase in the limits of areal flooding due to increased runoff and displacement of floodwater storage volume, although the proposed mitigation measures would reduce them to an insignificant level. BART, the Flood Control Zone, and local jurisdictions are evaluating proposals to improve the drainage characteristics of the area. As these improvements are constructed, flooding would be reduced throughout the area. The long-term impacts to Colma Creek with regard to flooding would be dependent on the improvement projects constructed. Please refer to Response 15.4.

- 54.24. Regarding Cumulative Impacts (Section 5.16), we find the discussion in this section to be particularly lacking. Specifically, what would the likely cumulative impacts be? The text is rather qualitative and doesn't include measurable amounts.

**Response.** In addition to Chapter 5, Chapter 3 provides a cumulative discussion for each environmental issue for each alternative. The presentation in Chapter 5 is meant only to be a summary of the cumulative effects. The cumulative discussions in Chapter 3 of transportation, community services, noise, regional and local air quality, and energy consumption all contain quantitative information regarding the magnitude of impacts. Other areas that are less quantitative are still considered fully and include land use, geology, hydrology, and biology.

- 54.25. Discussion of Growth-Inducing Impacts fails to acknowledge that the proposed project would, in fact, facilitate planned development in the study area and the Bay Area generally, and that failure to provide additional transportation facilities and services would delay some planned growth directly or indirectly.

**Response.** The DEIR/Technical Appendix on page 4-24 does indicate that the BART extension would enhance local development opportunities. More specifically, the analysis in Section 3.2.3, Land Use/Economic Activity, of the DEIR/Technical Appendix examines the ability of the BART extension to support local development objectives. Finally, on page 4-25 of the DEIR/Technical Appendix, it is noted that the No Build Alternative (i.e., not providing additional transportation facilities) would neither stimulate land development nor induce growth. Accordingly, the commentator's observations regarding growth inducement are recognized in the environmental document.

## 55. SOUTH SAN FRANCISCO BART CITIZENS ADVISORY COMMITTEE

- 55.1. BART not only does not have enough money for Alternative VI...but not even for Alternative III...which would...caus[e] economic, social and environmental havoc. The visual simulation on page 3.3.35 of the summary DEIR gives graphic evidence of what would happen under Alternative III in South San Francisco....How can BART be serious about building a transit system from Colma to the airport based on such a tenuous financial base?

**Response.** Please refer to Response 14.93 for a discussion of the status of the financial plan at the time of publication of the DEIR/SDEIS. The Financial Analysis section in Chapter 6, Volume I of this FEIS/SFEIS, describes the current financing program.

- 55.2. In our town of South San Francisco the Hickey Station would be directly across the street...from El Camino High School, a fact only causally mentioned in the Draft EIR. How can this happen to a local community? Because as it is stated on page 3.2-8 of the Summary DEIR "BART, by State law, is not required to conform to local plans and policies."

**Response.** The Hickey Station site was selected in consultation with cities and local community representatives after consideration of many factors. The site was selected because it is mostly vacant, and there are few nearby uses that would be adversely affected by BART and station-related traffic that would occur before school in the morning and after school at night. The South San Francisco El Camino Corridor Redevelopment Plan and associated General Plan Amendment GP-93-47 also recognize and favor the anticipated Hickey Boulevard Station if the track alignment is below grade.

- 55.3. BART has also grossly underestimated the South San Francisco traffic problems. Level of service at the intersections and on the streets near the proposed alignment are already unacceptable at peak hours. The problem will be further exacerbated with or without a subway alignment and the DEIR offers no adequate mitigation.

**Response.** Access to the BART stations by auto is based on MTC's travel demand model, and traffic impacts to local intersections were based on a sub-area model that used the results of MTC's model. The level of service calculations used the same methodology as the San Mateo County Congestion Management Plan. These calculations are set forth in the appendices to the Transportation Technical Report. The criteria for significant impacts are consistent with those used by the San Mateo County Transportation Authority and individual communities in the study area. Any significant traffic impacts found in South San Francisco will be mitigated, except those at the Junipero Serra/Westborough intersection. Please refer to Response 19.42 for a discussion of the Junipero Serra/Westborough intersection.

- 55.4. Update CalTrain to a modern, fast light rail system from Gilroy to downtown San Francisco. The CalTrain plan is financially feasible.

**Response.** The commentor's support for the TSM Alternative is noted. The BART and SamTrans boards have selected the Alternative VI Aerial Design Option as the LPA (refer to Response 2.7 for a discussion of the LPA selection process). As noted in Response 2.7, extension of BART to the SFIA does not preclude further improvements to CalTrain. Please refer to Response 14.92 for a discussion of the parallel CalTrain extension study.

## 56. SOUTH SAN FRANCISCO CHAMBER OF COMMERCE

- 56.1. We would encourage that station placement at Hickey Boulevard, Tanforan, and San Francisco International Airport would allow for convenient shuttle access to serve this area [east of Highway 101 in South San Francisco].

**Response.** The station placement at Hickey, Tanforan Shopping Center and the Airport International Terminal would provide the opportunity for convenient shuttle service to the employment complex east of Highway 101 in South San Francisco. The most direct opportunity for access would be from the Hickey Station via either Mission Road/Grand Avenue or Evergreen/Hillside.

- 56.2. During construction through South San Francisco, we would encourage that as little disruption to businesses located along the route as possible be made. This disruption includes road detours and closures for construction....A comprehensive notification system for the businesses and community is essential.

**Response.** Please refer to pages 3.13-54 and 55 in the DEIR/Technical Appendix for discussions of BART's plans to minimize disruption to the communities and businesses affected by the construction of this project.

- 56.3. We would encourage that local businesses be given priority in obtaining permits as vendors, if these will be allowed, at the South San Francisco BART station.

**Response.** The commentor's remarks related to vendor permit prioritization at the South San Francisco BART Station are noted.

## 57. TRAIN RIDER'S ASSOCIATION OF CALIFORNIA

- 57.1. BART's new plans ignore CalTrain, SamTrans, and high-speed rail as servers of SFO along with BART.

**Response.** CalTrain, SamTrans, and high speed rail were considered during the phases of early planning and identification of alternatives. The designs set forth in the DEIR/SDEIS were selected from these other options as the most feasible designs. Each of the BART build alternatives include intermodal stations with service between BART and CalTrain and between BART and the ALRS. Only Alternative VI and the Alternative VI Aerial Design Option do not include direct connection between CalTrain and the ALRS, because this connection is provided by BART. Patronage forecasts of service to SFIA by BART, CalTrain, bus, and auto are provided in Tables 3.1-15, 3.1-22, 3.1-28, 3.1-35, 3.1-43, 3.1-51, 3.1-57, and 3.1-67 of the DEIR/Technical Appendix. Please also refer to Response 23.3 for a discussion of the potential for high-speed rail. Please refer to Response 11.6 for an additional discussion of the proposed CalTrain downtown extension.

This letter states a preference for the 1992 LPA which had, according to the commentor, "a common rail terminal on the west side to service CalTrain, BART, future high speed rail service, and a SamTrans bus stop. This terminal is to be served by the airport's light rail line giving airport employees direct access to the United and American airline maintenance facilities and giving airline passengers access to all the airlines utilizing SFO." The same connection would be true under Alternative VI or the Alternative VI Aerial Design Option, with one exception: BART would provide service from the Millbrae Avenue Station instead of the ALRS service to an

external Airport Intermodal Station under the 1992 LPA. Please refer to Response 66.111 for a discussion of the double transfer required from CalTrain to BART to the ALRS. Service by CalTrain and SamTrans to SFIA is an important consideration for BART, and it was analyzed thoroughly in the DEIR/SDEIS.

- 57.2. Sixty-seven percent of all SFO employees live south of the airport, but BART's new studies completely disregard this fact.

**Response.** Estimation of transit patronage to the SFIA, including employees, was based on MTC's travel demand model. Please refer to Response 10.24 for a general discussion of the model and to Response 107.57 regarding residential location of SFIA employees and their access to the airport.

- 57.3. The CalTrain right-of-way currently traverses the airport property, a right-of-way which already has tracks and trains that run on them. How is it possible that you could have overlooked this fact?

**Response.** All alternatives make as much use of existing CalTrain (Joint Powers Board) right-of-way as possible. Additional right-of-way is shown only as required.

- 57.4. We cannot support BART's proposal to build a station under the airport and will oppose any continued efforts to bring BART into SFO without properly examining other alternatives that could provide the same service at a fraction of the cost to the taxpayers.

**Response.** The commentor's opposition to an underground BART station at the Airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. The Alternative VI Aerial Design Option was selected as the LPA by both boards (refer to Response 2.7 for a discussion of the LPA selection process). The LPA would include an aerial BART station at the SFIA.

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### 3.5 INDIVIDUALS AND BUSINESSES

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#### 58. ABC LOCKSMITH COMPANY

- 58.1. If they were to build a BART station in South San Francisco as part of an extension to SFO it would make it very easy to take BART into the city and out to the airport. BART would become truly a commute alternative for thousands of us who live in north San Mateo County and work in San Francisco. I like the plan for BART into the airport.

**Response.** The commentor's general support for the BART extension to the Airport, with a station in South San Francisco, is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. The Alternative VI Aerial Design Option was selected as the LPA by both boards (refer to Response 2.7 for a discussion of the LPA selection process). The LPA includes a BART station at Hickey Boulevard in South San Francisco.

#### 59. ABCO PRINTERS

- 59.1. Our only option is Alternative VI with a bored tunnel from Euclid Avenue to San Francisco International Airport.

**Response.** For cost and other reasons, the BART and SamTrans boards rejected a bored tunnel through San Bruno (refer to Response 17.68). Please refer to Volume I of the FEIR/FEIS for an explanation of why BART is considering an aerial alignment into SFIA. After considering public input regarding the merits of the various alternatives, both boards selected the Alternative VI Aerial Design Option as the LPA in November 1995 (refer to Response 2.7 for a discussion of the LPA selection process).

**60. ACHA, MA. ISABEL M.**

- 60.1. This letter is written to express my objection in the construction of BART line in the South San Francisco district.

**Response.** The commentor's general opposition to the BART extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans Boards when choosing the LPA in November 1995. The Alternative VI Aerial Design Option was selected as the LPA by both boards (see Response 2.7 for a discussion of the LPA selection process). Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18.

**61. AGID, GWEN**

- 61.1. Do not build an overhead station in SSF (at Chestnut)....An underground station will be much better for everyone.

**Response.** The station proposed for Chestnut under Alternative III is an underground station. Please refer to pages 2-36 and 2-37 of the DEIR/Technical Appendix, which describe the station as being in "retained cut," with the station platform about 24 feet below street level.

**62. AIRPORT AUTO PARTS, INC.**

- 62.1. I urge BART to adopt Alternative VI with bored tunnel construction through San Bruno. I do not support any cut-and-cover or any equivalent of a cut-and-cover construction proposal. I cannot afford any traffic and parking disruption, or any noise and dirt pollution.

**Response.** The commentor's support for Alternative VI with a bored tunnel through San Bruno is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The bored tunnel option was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

**63. ALBERT, PETER**

- 63.1. As I review the alternatives presented in Train to Plane, I evaluated each against the following criteria: Shaping Regional and Urban Form: How effectively does it use the BART extension to promote a city-centered urban form...How directly to the downtown...would BART bring its riders? How many potential riders could reach the planned BART station on foot or by transit?...Direct and Convenient Transit Access: What configuration of BART route and station best minimizes travel time, transfers, walking distance and overall through-route distance? ...Based on this evaluation...the two alternatives that fared the poorest were the Locally Preferred Alternatives. ...A

composite of Alternatives III, V, and VI...best meets the criteria defined [above]. Of the alternatives provided, Alternatives V-A and VI most closely approximate the composite alternative.

**Response.** The commentor's support for Design Option V-A and Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

- 63.2. If a BART/CalTrain parking garage is needed, it should be moved south toward the site of the existing CalTrain station, where there is already a set of large surface parking lots on the site used by CalTrain commuters, and more underused, vacant parcels adjacent to the CalTrain tracks farther to the south and north of the station. Using these sites to build parking garages instead of the land used for housing could avoid demolitions and even buffer the existing residences from the noise and vibrations [from] CalTrain and Southern Pacific operations.

**Response.** The site of the existing CalTrain station has insufficient acreage for a BART/CalTrain parking garage. The land south of Cupid Row Canal is uplands habitat of the San Francisco garter snake, an endangered species. Construction of any alternative on the sensitive species habitat west of Highway 101 would require approvals by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), and the U.S. Environmental Protection Agency (EPA) due to potential impacts to endangered species. Environmental resource agencies have expressed disapproval of the 1992 LPA and other alternatives with an intermodal station west of Highway 101 due to potentially significant impacts on prime habitat for the San Francisco garter snake.

In addition, the existing site of the CalTrain San Bruno BART Station does not have good access to Highway 101. Commuters from the south traveling north on Highway 101 would need to go through residential neighborhoods to access the station. For these reasons the existing San Bruno CalTrain Station is considered to have major flaws as a site for a BART/CalTrain station and parking garage and is considered impracticable and infeasible.

- 63.3. In general, the supply of parking for BART riders is most important where each BART line terminates....The pressure to provide parking at downtown San Bruno would be further diminished by a Millbrae Station, which would act as the corridor terminal....I strongly encourage BART and the City of San Bruno to re-evaluate the merits of constructing a massive parking structure in downtown San Bruno.

**Response.** The commentor is correct that a station in Millbrae would reduce the demand for parking in San Bruno. For example, the demand for parking in San Bruno under Alternative V with an end-of-the-line station in Millbrae would be 1,030 vehicles in 2010 while the demand under Design Option V-A with the end-of-the-line station in San Bruno would be 2,340 vehicles. If the I-380 San Bruno Station or the Downtown San Bruno Station were selected for the adopted project along with an end-of-the-line station in Millbrae, parking facilities would still be required in San Bruno to meet the forecasted parking demand. Otherwise, spillover parking and other impacts would occur in the vicinity of downtown San Bruno even with parking restrictions.

The forecasted access mode to a BART station for a federally funded extension of BART is determined by the federally-approved MTC travel demand model. The mode choice component of this model determined the number of patrons accessing the station by auto and whether they would park-and-ride or be dropped off at the station. If demand for parking spaces were not matched by

the supply, the result would be spillover parking in the vicinity of the station, causing disruptions to residential or commercial activities in the area.

**64. ALENTIEV, TIM**

- 64.1. I favor option VI airport terminal station.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

**65. ALLEN, ROBERT S.**

- 65.1. I support Alternative III with these modifications: 1. Keep it west of CalTrain to the end of the line....[to] simplify and cut the cost of construction. 2. Keep it at grade...[which] eliminates the cost and impacts of huge amounts of earthwork....[and] would drastically reduce BART seismic vulnerability. 3. Grade separate or close all street crossings....Grade separating existing CalTrain crossings would enhance public safety, reduce noise....[and] eliminate train-caused traffic impacts.

**Response.** The commentor's support for Alternative III with modifications is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

Clearance required for a BART track over CalTrain is greater than 30 feet. Thus, at a 3 percent grade, approach ramps would be 1,000 feet, which would make west side access to the airport impractical.

- 65.2. Extending BART from Colma to joint CalTrain/BART SFO station would cost under \$300 million (plus land) if...it stayed at grade with cross streets over or under...it stayed west of CalTrain all the way; and...intermediate stations were deferred. Half a billion dollars - 60 percent - less than any of the proposals!

**Response.** If the BART extension project remained at-grade, many streets running perpendicular to the alignment would be interrupted since fencing is required along an at-grade alignment. Because these are developed communities, many of the streets are major thoroughfares, resulting in major impacts if shut down. The local jurisdictions have indicated that they do not want to have their communities effectively divided by an at-grade alignment.

- 65.3. [Extending BART from Colma to a joint CalTrain/BART SFO station]....need not displace any residents or businesses.

**Response.** Given the lack of sufficient undeveloped land along the proposed route corridor, it is not possible to extend BART from Colma to a joint CalTrain/BART SFIA station without displacing any residents or business. Potential displacements for each alternative are addressed in Chapter 3 of the DEIR/SDEIS. Approximately 525 residents and 60 employees would be displaced under the November 1995 LPA, the Alternative VI Aerial Design Option.

- 65.4. [With Alternative III with the proposed modifications], there would be no subway or aerial BART structures, no heavy earthwork, almost no curvature. BART passengers would have daylight, scenic ride.

**Response.** BART passengers may have a more scenic ride under the Base Case Alternative. As discussed in the DEIR/Technical Appendix, however, the vertical alignment of this alternative would have significant adverse visual effects and divide communities in Colma, South San Francisco, and San Bruno.

- 65.5. [With Alternative III with the proposed modifications], CalTrain/BART commute riders would have a much faster and better ride. BART would be better poised for further extension to the south. Most airport passengers and employees would be served about as well with an external station as with a station under the proposed international terminal.

**Response.** All of the BART build alternatives are positioned for extension to the south, as this element was one criterion for choosing the alignment. Voters preferred an internal station as opposed to an external station. Please refer to Response 30.7 for a discussion of user preferences regarding the ALRS and an internal station.

- 65.6. Grade separations north of I-380 -- if SP tracks were removed -- would need to be only 13.5 feet above top of rail (ATR) instead of the 22.5 feet ATR of those on the CPUC list.

**Response.** The commentor is correct, if the Southern Pacific San Bruno branch service was terminated, grade separations of roads above BART would need to be approximately 13.5 feet instead of 24.3 feet above the top of rail as required for an operating electrified railroad.

## 66. ARTICHOKE JOE'S

- 66.1. At the outset, it needs to be pointed out that the 60 days comment period is, in this instance, totally inadequate to permit the public to comment fairly on the EIR....The subject document is voluminous, perhaps larger than any DEIR ever before propounded by BART or any other Northern California transportation agency.

**Response.** Please refer to Response 10.2 for a discussion of the document review period.

- 66.2. Access maps that depict the precise parcels of real estate that may be impacted by this project...were not made available for several weeks. We have only recently been granted access to them, but have not as yet received copies; they should have been attached to the DEIR itself.

**Response.** Please refer to Response 47.12 for a discussion of why specific properties that would be displaced were not identified.

- 66.3. If the routing is to be through San Bruno, BART must provide a bored tunnel. Anything less will involve unimaginable harm to San Bruno's citizens and businesses.

**Response.** Please refer to Responses 2.7 and 66.115 for a comparison of the short- and long-term construction impacts of bored tunnel versus cut-and-cover construction methods. Also please refer to Response 17.68 for a discussion of unmitigable impacts of the bored tunnel option.

66.4. Our client supports the City of San Bruno's efforts to secure a bored tunnel at BART's expense as part of Alternative VI....

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (see Response 2.7 for a discussion of the LPA selection process). A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

66.5. If CalTrain is connected to the airport's planned light rail system (which will be constructed at the airport's expense), we will accomplish the goal of extending public transit to the airport...at a cost that is manageable, presently fundable, and not a burden on the citizens or communities along the way. The DEIR prepared by BART does not adequately discuss this alternative. Instead, the DEIR underplays the "TSM" alternative (which is the alternative under which certain work will be done to improve the CalTrain system) and downplays the vitality of the CalTrain system. In all fairness, the CalTrain option needs to be more fully discussed in the final EIR and given full and equal billing with the other alternatives.

**Response.** As described on page 2-26 of the DEIR/Technical Appendix, the TSM Alternative includes a CalTrain/ALRS/SamTrans Station on the Airport property west of Highway 101. This Station also provides facilities of SamTrans buses and parking spaces for 160 vehicles and on and off ramps to/from Highway 101. Also as part of the TSM Alternative and all of the BART build alternatives, CalTrain service would be expanded to 86 one-way weekday train trips between San Francisco and San Jose. This Station also provides facilities of SamTrans buses and parking spaces for 160 vehicles and on and off ramps to/from Highway 101.

Alternative III TSM is fully evaluated in the environmental sections of Chapter 3, Environmental Analysis in the DEIR/Technical Appendix. See Table 2.4-2, Comparison of Key Impacts in the DEIR/Technical Appendix compares key impacts of all alternatives evaluated in the DEIR/SDEIS including the TSM Alternative III.

While connecting the ALRS to CalTrain would extend public transit to the SFIA overall, the TSM Alternative performed poorly in meeting the goals and objectives of this study. In fact, the TSM Alternative is ranked high in one goal, medium in 2 goals and low in six goals of goals identified for the project. The commentor is referred to Response 14.7 for additional discussion of goals and objectives.

In addition, the commentor's contention that the ALRS extension to CalTrain "will be constructed at the airport's expense" is not a foregone conclusion. In 1995, the JPB inquired about the Airports Commission's position and legal commitment for an ALRS connection to CalTrain. Based on this request, the San Francisco City Attorney has rendered a legal opinion on the Airport's commitments for making a ALRS connection to the west of Bayshore property for a CalTrain station. The legal opinion as summarized by the San Francisco Attorney's office is shown below:

**"Issue** Did the Airports Commission, through its adoption of the Airport Final Mitigation plan, commit to extending the Airport Light Rail System "(ALRS)" to the west of Bayshore for a CalTrain Station?

**Conclusion** No. The relevant measure in the Final Mitigation Plan provided for an ALRS extension to a combined BART/CalTrain station, and not to a CalTrain only station. Although the Commission is not legally required to extend the ALRS to the west of Bayshore for a CalTrain station, the Commission has discretion to consider such a proposal, subject to legal requirements." In short, the Airport has not agreed to pay for the extension of the ALRS to connect with CalTrain but has discretion to consider such a proposal. In addition, the cost to repay airport loans will affect airline ticket holders.

- 66.6. We also need to comment preliminarily on the possibility that BART will opt for a final alternative that will be a combination of the present alternatives....There will have to be a new DEIR on the new alternative. Anything less would amount to a deliberate avoidance of the obligation to provide a full and fair EIR with respect to the chosen project.

**Response.** Please refer to Response 2.7 for a discussion of the focused recirculated report, which led to the selection of the Aerial Design Option LPA.

- 66.7. The DEIR never clearly compares the physical impacts of a cut-and-cover method of construction to a bored tunnel method....There will be 500 tons of dust generated during construction, and good portion of it will be in San Bruno. Nowhere is this impact fully or fairly analyzed in the EIR.

**Response.** The physical impacts of the cut-and-cover and bored tunnel construction methods are described in the DEIR/Technical Appendix, Section 3.13. Direct comparison of the two methods is presented in the discussions of the Alternative VI Tunnel Option through San Bruno, which appear in each subsection (transportation, land use and economic activity, etc.). Although the physical impacts of the two methods are similar in most cases, there are some differences, as noted below. References to page numbers in the DEIR/Technical Appendix appear in parentheses.

- The cut-and-cover construction method would result in greater transportation impacts than the bored tunnel method. The cut-and-cover method would produce a physical barrier that would restrict local traffic, bicycle, and pedestrian circulation (3.13-27).
- The bored tunnel construction method would result in greater land use impacts than the cut-and-cover method. The bored tunnel method would require twice as many daily truck trips to remove soil excavated from the San Bruno portal (3.13-66).
- The cut-and-cover construction method would potentially require more utility relocation than the bored tunnel method. Underground utilities that could be avoided using the bored tunnel method (by tunneling under them) would require relocation with the cut-and-cover method (3.13-11, 12, and 106).
- The cut-and-cover construction method would result in greater biological resource impacts than the bored tunnel method. The cut-and-cover method would require relocation and permanent channelization of the Cupid Row Canal, whereas the bored tunnel method would avoid the Canal (3.13-121, 144). However, one of the three optional tunnel-boring launching sites would disturb approximately 0.43 acres of seasonal wetlands located on the SFIA property west of Highway 101 (3.13-142).
- The cut-and-cover construction method would result in greater hydrology and water quality impacts than the bored tunnel method. The cut-and-cover method would create greater disturbance of surface soils, resulting in more sediment erosion. Additionally, the cut-and-

cover method would require more temporary water diversion, increasing the risk of flooding (3.13-156).

- The bored tunnel construction method would result in greater noise and vibration impacts than the cut-and-cover method. Tunnel mining and the operation of muck trains to remove excavation spoils would produce additional groundborne noise and vibration impacts to nearby receptors (3.13-195).
  - The bored tunnel construction method would result in slightly greater PM<sub>10</sub> emissions than the cut-and-cover method (3.13-206). The greater predicted emissions associated with the bored tunnel method are due to the larger area over which construction would occur, rather than the construction method itself. Please refer to Response 66.102.253 for a discussion of the methodology employed for calculation of construction-related PM<sub>10</sub> emissions.
- 66.8. The DEIR addressed the impact of noise and vibration as to local businesses only; what about the impact on local utility lines? Even as to local businesses, the analysis is incomplete. For example, will Artichoke Joe's be able to use its computers during construction?
- Response.** Artichoke Joe's would be able to use its computers during typical construction activities and during BART operations. BART would be responsible for continuous utility service be provided, except for short shutdowns to reconnect, during the entire course of construction. Vibratory impacts on local utility lines are addressed in Responses 12.6 and 66.223.
- 66.9. What is the danger that an underground utility line will be severed during construction? What steps is BART taking to avoid this potential impact, and to mitigate it if and when it should occur?...Will any utility lines have to be relocated? If so, which ones? And who will pay for the relocation?...There is no discussion of potential corrosion to utility lines caused by improper construction procedures; if this occurs, it could be a disaster, yet there is no discussion of this potential.
- Response.** As with any large-scale construction project, particularly one that involves underground work, there is a potential to inadvertently damage an underground utility line. To minimize the potential for this occurrence, BART will, during preliminary engineering, meet with utility owners and identify the location of utility lines within the construction right-of-way. As described in the DEIR/Technical Appendix, beginning at page 3.13-11, utility relocation is a long process that is carefully planned to minimize service interruptions. There are a variety of techniques that can be employed to avoid utility relocation, and BART will seek to apply these first since relocation is costly. In those instances where relocation is required, BART will pay for realignment. Relocation will be performed in accordance with the utility's standard and/or specifications and can be inspected by the utilities to ensure that improper construction procedures are avoided.
- 66.10. The DEIR mentions placing some of the nearby properties on "isolators" to lessen the impacts of noise and vibration....This is very disruptive; it should be explained in more detail so people know what will be done to them.

**Response.** To isolate an existing building to mitigate groundborne noise and/or vibration would require raising the building from its foundation and placing an elastomeric pad at the points where the building rests on its foundations. This measure would be considered only for lightweight structures such as trailers, or one- or two-story wood frame residential buildings. The occupants may be required to vacate their residence during this procedure if the mitigation is

complex. BART would provide temporary lodging while work is in progress. Such work would probably require two to three months to complete.

- 66.11. BART must address the potential settlement caused by construction and equipment usage, and its resultant impact, if any, on utility lines.

**Response.** In Section 3.13.9, Construction/Geology, of the DEIR/Technical Appendix, beginning on page 3.13-107, potential construction-related geotechnical hazards and the strategies for minimizing impacts are identified. As noted in this section, BART already has adopted design criteria to address impacts related to settlement. No significant environmental effects have been identified due to settlement caused by construction and equipment usage, based on these criteria and BART's experience building transit systems. A general refinement of precise construction methods will occur when additional geotechnical studies are completed by BART as part of its final engineering. The cities will also have some input regarding the types of construction equipment/vehicles that can operate on city streets. BART contractors will be required to conform to any weight limitations imposed by local jurisdictions and require them to minimize settlement.

- 66.12. The DEIR does not specifically discuss what the impacts will be on local police response time. If intersections are impacted, how will it affect police response time, for example?

**Response.** Under Construction Community Services in Section 3.13.2, Impact Assessment and Mitigation of the Summary DEIR/SDEIS, Construction/Community Services, acknowledges that response times by local emergency service providers would be affected by BART construction. Any disruption/closure of local streets would be coordinated with the local jurisdictions.

- 66.13. The proposal to place San Bruno's main police station adjacent to the BART station...will not only move the central police station out of central San Bruno, but during peak shopping periods (the Christmas season, for example) response time may be compromised by traffic snarls.

**Response.** Placement of San Bruno's main police station adjacent to the BART station was recommended by the City of San Bruno as part of a series of revisions to the conceptual plan for the Tanforan Station. BART's proposal does not include the San Bruno police station and will incorporate a transit police station only. Accordingly, the concerns expressed by the commentor have been addressed. Please refer to Responses 14.57 and 16.2 for further details regarding BART's response times and demand for local police support.

- 66.14. The DEIR mentions the relocation of businesses and residences due to the project's impact on land use, but does not provide any specific information. For example, the DEIR totally omits detailed land impact/acquisition maps. Those maps are the only way for property owners, business owners, and residents to pinpoint whether or not they will be affected.

**Response.** Please refer to Response 47.12 for a discussion of why specific properties that would be displaced were not identified.

- 66.15. The DEIR does not provide detailed information as to the potential "footprint" of the various stations, thus preventing a full assessment of potential impacts; moreover, the vague discussion of the different station possibilities makes it difficult for the public to compare different alternatives....We believe each individual station needs to be analyzed in a separate EIR prepared for the community it will both serve and impact....What is BART's position on this? Will it be done?

**Response.** The station footprints are contained in the DEIR/Technical Appendix in Chapter 2, Project Description and Alternatives. The DEIR/SDEIS provides a full assessment of the station layouts and designs. Please also refer to Response 2.7 for a discussion of further analysis of the new LPA, and Response 66.185 for a discussion of design and land use information regarding Tanforan and Downtown San Bruno stations.

- 66.16. Acquisition of easements [for mobilization and laydown areas] are noted, but no specifics are given. What specific parcels will be impacted in this regard?

**Response.** Please refer to Response 29.42 for a discussion of the selection of mobilization and laydown areas.

- 66.17. The only areas of the San Francisco Water Department right-of-way identified for use are located between Chestnut Street in South San Francisco and Forest Lane in San Bruno, and between Center Street and Millbrae Avenue in Millbrae. Identification of other proposed rights-of-way to be utilized for laydown areas in the remaining portions of the alignment are not explained in detail. This information should be included.

**Response.** The San Francisco Water Department land shown on Alternative VI drawings (Figures 3, 4, and 5 in the Design Appendix) extends from Forest Lane to Florida Avenue in downtown San Bruno. Additional parcels of property intended to be used as contractor's laydown areas are shown throughout the Plan and Profile drawings contained in the DESIGN APPENDIX - CONCEPTUAL DESIGN DRAWINGS. The contractors will also utilize portions of the existing SFWD property (the former Municipal Railroad right-of-way) as linear laydown areas. The SFWD property is located along the westerly side of the Southern Pacific Railroad property from Colma to San Bruno and along the westerly side of the Joint Powers Board property (formerly the Southern Pacific Railroad property) from San Bruno to Millbrae.

- 66.18. Among the more serious negative impacts is the loss of sales revenue by local merchants, and the corresponding loss of sales and business tax revenue to the City of San Bruno....The cut-and-cover method devastates local merchants, while a bored tunnel substantially mitigates the problem.

**Response.** Please refer to Response 17.69 for a discussion of replacement parking during construction.

- 66.19. Once the proposed Tanforan station is operational, there will be an additional impact, to wit, the loss of parking at the Tanforan Shopping Center, and at the adjoining Town Center facility....The resultant loss of business is obvious, and this exact phenomenon has been experienced when BART has constructed stations near other shopping centers in the Bay Area (most notably in El Cerrito). This impact is not mentioned in the DEIR.

**Response.** Plans for a potential Tanforan Station are intended to include sufficient parking such that BART patrons do not fill shopping center spaces.

The revised Tanforan Station design changes the parking garage from a joint use facility with the Tanforan Park Shopping Center Garage to a separate BART garage located to the east of Sears Tire, Auto and Battery Center. Please refer to Response 241.9 for a discussion of overflow parking into the Tanforan Shopping Center. Park-and-ride BART patrons at the Tanforan Station would not use the Towne Center parking lot because of its distance from the BART station and the requirement to cross Sneath Lane.

66.20. If Artichoke Joe's ceases business, or suffers a major business reduction, the loss in business taxes is substantial...between \$260,000 and \$504,000 per year....If Artichoke Joe's is forced to reduce staff, there will be a corresponding diminution to neighboring businesses...a loss of sales tax revenues in San Bruno...[and] a corresponding loss in business taxes and refuse franchise fees....

**Response.** Comment noted, Page 3.13-65 of the DEIR/Technical Appendix indicates that there would be significant disruptions to businesses. The economic impact analysis prepared for Artichoke Joe's and submitted as part of their comments is based on incorrect assumptions about the number of parking spaces that will be affected during the construction period. With the planned phased construction period, the amount of parking available to Artichoke Joe's patrons will not be reduced at any given time, and thus impacts on patronage and employment would be substantially less than that anticipated by the commentor.

66.21. The Belle Air neighborhood, a moderate income community...will decline as the result of this project. During construction, property maintenance expenses will increase, and rents will plummet; this is a tailor-made formula for neighborhood decline....The DEIR does not fully treat this issue, which must be dealt with if the concept of "environmental justice"...is to have any meaning.

**Response.** The report cited is speculative. There is no evidence to indicate that property maintenance expenses would increase or that rents would plummet during construction. However, the environmental justice analysis of the DEIR/SDEIS does state that the neighborhood may experience construction impacts, including disruption to businesses. Please refer to page 7-15 of the DEIR/Technical Appendix for this discussion. Construction impacts would be mitigated to ensure that any adverse impacts would be minimized.

Historical data reveals an increase in property values and a trend toward intensification of land uses surrounding completed BART stations. The U.S. Department of Transportation, in conjunction with the U.S. Department of Housing and Urban Development commissioned a study entitled, "Study of BART's Effects on Property Prices and Rents," Author Caj O. Falcke, John Blayney Associates/David M. Dornbusch & Co., Inc., published 1978. A more recent study further supported the validity of the trend toward increased property values around BART stations. The study "BART at 20: Land Use and Development Impacts," was written by Robert Cervero, and published by the University of California at Berkeley Institute of Urban Research and Development.

66.22. Even with a BART station looming on the horizon, the shopping ambiance at Tanforan during construction will be less than desirable. There will be a loss of sales each year on the order of almost \$3 million. The three year total projected is approximately \$8.5 million. The total projected losses in sales tax, business license fees and refuse franchise fees amount to \$91,130 over the three year construction period.

**Response.** The loss of sales at Tanforan Park forecast in the commentor's economic analysis is based on an assumption that sales will decline (page vii) for which no basis is presented. Such forecast is inconsistent with the forecast contained in the independent analysis prepared for the City of San Bruno by Bay Area Economics (BAE) and, in any case, represents less than two percent of annual sales at Tanforan Park Center. This annual change is within a normal annual fluctuation based on consumer confidence in the economy and the operating or closing of competing outlets. Sales per capita in San Bruno are well above the state and county averages, and thus are vulnerable to competition from potential new outlets.

66.23. Even though a garage will be constructed at the Tanforan Station, the demand for parking will exceed the number of spaces.

**Response.** Table 3.1-95 in the DEIR/Technical Appendix shows that under those alternatives where a station is located at Tanforan (e.g., the proposed project, the Base Case Alternative and Alternative VI), parking demand at the Tanforan Station would not exceed capacity and adequate on-site parking would be provided for BART passengers.

66.24. No matter what happens, San Bruno stands to experience a punishing economic decline. This point is nowhere discussed in the EIR; it should be studied in detail, in order that San Bruno, as a participating community along the proposed route, can make an informed decision on whether it wants BART coming through the heart of the city; the same sort of analysis should be done for the other communities along the route.

**Response.** There is no evidence to indicate that San Bruno "stands to experience a punishing economic decline." The conclusion of the economic impact assessment performed for the EIR/EIS was confirmed by the city's economic study.

66.25. One specific issue relative to Alternative VI that must be addressed is the impact of San Bruno Ordinance 1446, which places severe restrictions on changes to and/or expansion of the parking structure at Tanforan. Any such changes may well require a vote of the people. This issue should be thoroughly studied, and the ordinance may prevent the changes to the Tanforan parking structure from taking place, or may substantially delay them.

**Response.** Since BART is exempt from local ordinances or zoning, addition to or expansion of a parking garage for the BART station adjacent to the Tanforan Park Shopping Center would not be subject to the provisions of San Bruno Ordinance 1446.

66.26. The downtown San Bruno business community features many moderately sized ethnic businesses. These businesses are threatened with extinction if the BART project proceeds. While these businesses might relocate to other communities, the residents of San Bruno, many of whom are ethnic minorities themselves and who currently frequent these business establishments, will be deprived of the convenience of the services they presently enjoy....The DEIR does not address this issue, and there is a Presidential Executive Order that requires these issues to be taken into account....

**Response.** The DEIR/SDEIS has examined the impacts of the extension on the San Bruno ethnic business community in the section on Environmental Justice (Chapter 7). Specifically, the DEIR/SDEIS recognizes potential impacts on "disruption of community cohesion," "restricted access to businesses," "disruption of economic activity" and "disruption to businesses" in the San Bruno Park and Belle Air neighborhoods. These impacts have contributed to the conclusion that each of the build alternatives may create disproportionate construction and/or operational impacts on low-income neighborhoods. This conclusion is made pursuant to the Presidential Executive Order to which this comment refers (i.e., Executive Order No. 12898). This Executive Order is discussed at length in the DEIR/SDEIS. Indeed, the environmental justice analysis in the DEIR/SDEIS is designed explicitly to address the concerns evidenced by the President's Executive Order.

66.27. The negative impacts of this project on the 500 elementary school children who attend Belle Air and Parkside Elementary Schools: aside from the potential devastation to these neighborhoods, there is the problem of the construction site becoming an attractive nuisance for curious children who will inevitably wander through the construction area. In addition, there is the problem of

traffic patterns and congestion threatening to increase the likelihood of injury to a child in the neighborhood.

**Response.** The construction area will have protective fencing at all times to minimize safety problems. Truck routes and scheduled deliveries will be controlled to minimize conflicts with peak traffic and pedestrian flow. The safety of surrounding neighborhoods as it relates to diverted traffic during construction will be a component of the traffic management plan in the construction plan. The truck route to be used for construction of the BART alignment through San Bruno would be approved by officials from the City of San Bruno.

- 66.28. There is also the potential problem of noise and vibration and its impact on the learning environment.

**Response.** Noise and vibration impacts regarding educational facilities are discussed in the DEIR/Technical Appendix on pages 3.9-28, 3.9-39, and 3.9-64, and additional discussion is contained in Responses 21.9, 28.1 and 28.3.

- 66.29. ...One impact that must be avoided at all costs is the potential isolation of school children as a result of this construction[i.e.,]...the potential isolation of a minority student population.

**Response.** There is no evidence that construction will result in isolation of a minority student population. Please also refer to Response 22.2.

- 66.30. There is a danger that the wetlands area adjacent to Lion's Field will be destroyed....There is an impact to endangered species (garter snake)...There are problems with stockpiling contaminated waste...and there are ground and air pollution problems....

**Response.** Wetlands in the vicinity of Lion's Field are located in drainage ditches west of the CalTrain tracks, east of the field adjacent to highway 101 and within/south of Cupid Row Canal on the SFIA property known as west of Bayshore. Impacts to endangered species are discussed within Volume I of the FEIR/FEIS and coordination regarding mitigation is included in Volume V, Technical Appendix.

With regard to stockpiling contaminated waste, all fill subject to removal as part of the project would undergo testing for hazardous contaminants. Any areas with potential contaminants would be identified prior to construction. Fill found to contain hazardous materials would be removed, disposed of and/or remediated per California Health and Safety Code requirements. In this regard, BART must comply with the regulations of the State Department of Toxic Substances Control and other local environmental health departments regarding all ground and airborne contaminants.

For additional response addressing these concerns please refer to Responses 3.2, 4.3, 6.30, 14.69, 24.59, 24.61, and 54.20 above relative to wetlands and endangered species. Please refer to Response 66.7 in regards to air pollution, and Response 5.1 in regards to contaminated wastes.

- 66.31. The Historical Resources Information System Records Office of the Northwest Information Center...has not received this DEIR and, thus, has not had the opportunity to review and comment upon it. This oversight should be corrected immediately.

**Response.** A copy of the DEIR/Technical Appendix was mailed to the Historical Resources Information System Records Office of the Northwest Information Center on November 15, 1995.

On December 5, 1995 BART received notice that the Northwest Information Center had received the DEIR/Technical Appendix and had no comments.

- 66.32. The BART SFO extension could impact and harm Native American sites in the unsurveyed portion of the project area.

**Response.** All unpaved or undeveloped areas of the original project corridor have been surveyed for archaeological deposits (Archeological Survey Report, page 9). If the final project design indicates potential impacts to cultural resources in an unsurveyed, undisturbed area (if extant), then additional archaeological investigation would be necessary. Mitigation Measure 2.1 (DEIR/Technical Appendix, page 3.4-15) is designed to address the discovery of archaeological deposits. Please also refer to Responses 12.4 and 16.3 for further details regarding cultural resources.

- 66.33. A planning issue that should be addressed in the EIR: namely, whether San Bruno and adjoining communities are going to be hit twice -- once by the BART extension project, and then again when grade separations for increased CalTrain service need to be constructed. This problem stems from the fact that CalTrain plans on increasing service along the present line and, as a result, the tracks will have to be elevated (grade separated) to avoid interfering with surface street traffic. If this is to be done, it should be coordinated with the BART construction, so there is one period of disruption, not two. This issue is not addressed at all in the EIR.

**Response.** Additional track or grade separations for CalTrain is a separate project, to be undertaken by the Joint Powers Board. Grade separations were not included in the document because the requirements for grade crossings and other features of that project have not been fully defined. Consequently, the planning and engineering for that proposed project have not progressed sufficiently for analysis. Also, the time frame for implementation of that CalTrain expansion has not been determined. Therefore, BART could not include it in the cumulative impact analysis. Since the timing of the CalTrain expansion is assumed to be substantially longer than the implementation time frame for the BART project, coordination of construction activities would not be feasible. It should be noted that the City of San Bruno rejected BART's Aerial Structure in the original AA/DEIR/DEIS.

- 66.34. Widening San Bruno Avenue...needs to be done to counteract impacts caused by this project and it should be paid for by BART. The City of San Bruno should not be burdened with mitigating these impacts. This issue should be addressed in the final EIR and assurances given as to how BART will handle this problem.

**Response.** Please refer to Response 17.25 for a discussion of widening San Bruno Avenue.

- 66.35. BART needs to reassess its traffic and parking data and provide a sound basis for the numbers, assumptions, interferences and conclusions that are stated in the EIR. As presently written, the inaccuracies do not provide a proper basis for decision making.

**Response.** No specific inaccuracies in the traffic and parking analysis are indicated in this comment letter. Discrepancies identified by other commentators are addressed in those responses, and the transportation analysis of impacts associated with the BART extension is sound and accurate.

66.36. According to the tables presented in the EIR, the percentage of airport workers and patrons using transit will be significantly lower after the BART extension is completed. Where is the benefit, under those circumstances, to justify the costs of this project?

**Response.** The percentage of transit trips to the SFIA in 2010 would be 9.2 percent under the No Build Alternative as shown in Table B-5, Alternative I Daily Transit Person Trips to the SFIA, in Appendix B to the DEIR/Technical Appendix, and for example, would increase to 14.2 percent under Alternative VI as presented in Table B-37, Alternative VI Daily Transit Person Trips to the SFIA, in Appendix B to the DEIR/Technical Appendix.

66.37. The estimates of ridership on the improved CalTrain line from the south appear to be understated.

**Response.** As required by FTA, MTC's mode choice model was used to estimate CalTrain ridership. These estimates are considered to be the most accurate possible given the assumptions of the model.

66.38. The DEIR does not adequately address the relevant issues. It either omits information or skirts issues that require a full and unbiased explication; much of the data in the DEIR is faulty and unreliable. For these reasons, the DEIR, as presently written, does not provide a sound basis for local officials to make intelligent decisions about this project. It does not begin to provide a valid predicate for BART's proposed actions, nor does it enable the public to fully assess BART's course of action. And if BART intends to select bits and pieces of various alternatives and combine them into yet another "alternative" solution to the proposed routing, it will not solve the problem, for even that alternative will not have been adequately studied in an EIR.

**Response.** Please refer to Response 2.7 regarding the adequacy of the analysis and its usefulness as a valid predicate for BART's course of action.

66.39. The January 1995 Draft Environmental Impact Report failed to indicate that [significant negative economic and fiscal] effects will be induced on the San Bruno downtown, the Tanforan Shopping Center and the Belle Air, Lomita Park and San Bruno Park Neighborhoods. Similarly ignored were the negative effects that the operation of the system can be expected to produce after the Tanforan station called for in Alternative VI is completed...During the construction of the subway through the San Bruno downtown, the disturbances of a construction period that based on past experiences, could take three years, the noise, dirt, traffic impedance, and reduction in available parking that would accompany a cut-and-cover construction would reduce the sales of local businesses. Under both a cut-and-cover construction approach or a bored tunnel, the Tanforan Shopping Center would similarly face a reduction in sales.

**Response.** The Bay Area Economics (BAE) study prepared for the City of San Bruno concluded that there would be an annual fiscal benefit to the city amounting to approximately double the one-time revenue loss associated with loss of business from construction impacts. Alternative VI as well as Alternative VI Aerial Design Option would minimize the loss of local businesses in San Bruno compared to other alternatives considered because there would be less displacement.

66.40. Possible downtown tunneling impact: all work is two stories below the ground and does not stop traffic or pedestrians or raise dust. But, due to the weight of rumbling trains over the structurally unfinished tunnels, Southern Pacific - SAMTRANS railroad tracks may need to be relocated temporarily on to First Street between San Mateo Avenue and San Luis (two blocks south of Cupid), similar to the cut-and-cover plans. This is about 4000 feet, or 3/4 mile. This item is not mentioned in the description for tunneling, only for cut-and-cover. The need is very probable here.

**Response.** The existing CalTrain tracks do not require relocation to First Street for either the cut-and-cover or tunnel option. For the cut-and-cover option, the southbound track must be taken out of service during construction (see page 3.13-4 of the Summary DEIR/SDEIS). For the tunnel option, surface subsidence would occur over the tunnels, as described in Response 17.68.

- 66.41. First Street, though not mentioned in the EIR for VI-tunneling, will probably be narrowed to 20 feet wide to allow the SPRRA/SAMTRANS trackage shoofly relocation for at least 9 to 12 months during active tunnel boring and wall building. We note that while complete shoofly operations and grading can be accomplished within the SPTCo easement and not interfere with First Street, a safety buffer strip would not exist between the trackage and the street unless a portion of the street were taken. Huntington Avenue (including the municipal/CalTrain parking lot), though not mentioned in the EIR for Alternative VI-tunneling, may also be narrowed to 20 feet or at least have traffic speed and weight restrictions in place for 3 to 9 months while tunnel boring and wall building are actively in progress. This is not likely.

**Response.** Tunneling through San Bruno in Alternative VI would occur entirely below the surface except at the portal sites near I-380 and south of the U. S. Post Office (formerly the Armory). Relocating the existing CalTrain tracks using a shoofly would not be necessary for this work. These portal sites are located in existing open areas away from both Huntington and First Avenues. Thus, these avenues will not be narrowed. Since all excavation takes place below ground, neither street will be impacted at the surface so as to require restrictions, detours or mitigations.

- 66.42. Huntington Avenue, 1 1/2 to 2 1/2 years overall. A continuance from adjacent work noted above, though not likely needed and not mentioned in the EIR for Alternative VI-tunneling, Huntington may also be narrowed to 20 feet, or at least have traffic speed and weight restrictions in place for 3 to 9 months while tunnel boring and wall building are actively in progress.

**Response.** Please refer to Response 66.41 for a discussion of the need to narrow Huntington Avenue with the tunnel construction option of Alternative VI.

- 66.43. First Street, though not mentioned by the EIR for cut-and-cover may be narrowed to 20 feet wide to allow the SPRRA/SAMTRANS trackage shoofly relocation for at least 9 to 12 months during active tunnel boring and wall building....Huntington Avenue, though not mentioned by the EIR for cut-and-cover, may be narrowed to 20 feet and may have speed and weight restrictions in place for 3 to 9 months while cut-and-cover work is actively in progress.

**Response.** Please refer to Response 66.41 for a discussion of the need to narrow First and Huntington Avenues with cut-and-cover construction under Alternative VI.

- 66.44. Construction line gates to public streets are required at 500 foot intervals in any area narrower than 60 feet. Though stated in the EIR quite generally, this would imply gates only in the cut-and-cover operations where active surface excavation is taking place. Since BART will have taken over at least the CalTrain land, Huntington Avenue to its centerlines and the parking lot during cut-and-cover (a 140 foot width) through Downtown, this will be unnecessary. Similarly, since BART will have taken over the full BART/SPRRA/CalTrain/I-380 - San Bruno Lumber Yard area (a 120 foot narrowest to 360 foot maximum width), this will also be unnecessary at Tanforan.

**Response.** The commentor is correct. As described on page 3.13-6 of the DEIR/Technical Appendix, access is required every 500 feet in the narrow right-of-way in Colma and South San Francisco. The only alternatives which impact the San Bruno Lumber Yard are Alternatives IV,

V, V.A and V.B, which use that site and the surrounding neighborhood as the optional location for the proposed I-380/San Bruno Station, as shown on drawings 39, 113, 115 and 117.

- 66.45. BART/EIR recognizes in Section 13.VI.8 [of the DEIR/Technical Appendix], page 3.13-65, that "...50 truck loads of tunnel muck per day from the San Bruno Portal for a four- to six-month period would generate noise, dust and potential safety hazards if local streets are used as haul routes...If the temporary access route across the SFIA property (wetlands) to Highway 101 is used, these neighborhoods would not be impacted." We note that the EIR's figures may be low by our estimates.

**Response.** The estimates assumed two tunnel boring machines would be in operation at the same time, each averaging 40 feet per day advance rate. This would produce approximately 50 trucks per day, each truck hauling 20 cubic yards per load.

- 66.46. We note the following adjustment. From 60,000 to 90,000 total trucks could rumble past 30 to 70 low income Belle Air dwelling units every 3 minutes for 1 1/2 years. (The difference being, 60,000 for a bored tunnel and 90,000 for a cut-and-cover.) As the neighborhood quality collapses in Belle Air's renter community, leases which terminate prior to BART's 1 1/2 year term will not be renewed. The worth of the other rental units and of the resident owned units will fall.

**Response.** Although truck routes and construction techniques that reduce impacts on residential areas will be used wherever possible, this would be an unavoidable adverse impact. Rental units qualify as a business under the Uniform Relocation Act guidelines. Therefore, a business owners demonstrable loss of income to a business may be addressed under federal and state relocation laws as applicable.

- 66.47. As the weak, narrow residential street pavement collapses from the weight of 16 ton trucks 10 hours each day for 370 days, the utilities thereunder will be destroyed, causing more cost to San Bruno and more mitigation costs to BART.

**Response.** During construction planning, cities will identify street limitations and roadways that are suitable as haul routes. To avoid disruption to residential neighborhoods and to minimize safety issues, residential streets should not be considered eligible as construction routes unless there are no practicable alternatives. Local enforcement and BART through its mitigation monitoring will police construction contractors and assure compliance with approved routes.

Contractor requirements for repaving streets will be included in contract documents. The contractor will be responsible for repaving streets that have failed as a direct result of hauling. Monitoring road damage will be done via pre-and post-videos of the haul roads. Considering the minimum depth of utilities, damage to utilities during construction is unlikely.

All streets are generally required to support heavily-laden fire trucks which have similar axle loads as haul trucks.

- 66.48. Permanent Land Dislocation: 6 and 3/4 acres presently covered by an existing 3-story parking garage and one commercial building occupied by J.C. Penny Auto Repair Center. The EIR does not allude to the auto store or its correct quantity of employees.

**Response.** The commentor is correct that the displacement of the J.C. Penney Auto Repair Center was not included in the DEIR/SDEIS. A visit to the site in May 1995 revealed that the

- Auto Repair Center had closed and the building was vacant (no employees). The existing parking garage would be retained and incorporated into the Tanforan Station under Alternative VI.
- 66.49. Note that BART/EIR uses the term "temporary" to describe the 2 1/2 year occupation of San Bruno Lumber Yard land. After 2 1/2 years, I doubt that S.B. Lumber will return to the site.
- Response.** On page 77 of the Design Appendix, the "temporary construction easement" which appears to be in the middle of the San Bruno Lumber Yard is intended to point to vacant land adjacent to the right-of-way. BART does not intend to use the lumber yard as a temporary laydown yard for Alternative VI. The easement limit lines will be corrected on page 77 of the Design Appendix.
- 66.50. Though not mentioned for the tunnel plan, First Street may be fenced off to the center of pavement as a temporary construction R.O.W. for relocation of the SPRR/SAMTRANS tracks, which tracks are in settlement zone over the tunnel. This will be a 25x1000ft strip, 0.58 acres of City land.
- Response.** Please refer to Response 66.41 regarding the need to narrow First Avenue during construction of the Alternative VI, Aerial Design Option.
- 66.51. Since the BART R.O.W. will be depressed 18 to 22 feet, constant interferences and relocation costs are unavoidable. [Utility] Downtime is unacceptable, since many Sneath Blvd. businesses are medical clinics and refrigeration and water dependent food establishments.
- Response.** The BART right-of-way should not affect Sneath Boulevard businesses. Utility relocations will be accomplished in a manner that eliminates or minimizes disruption to customers. Please refer to Response 17.84 for further discussion of efforts to minimize utility disruptions.
- 66.52. The cost of the relocation and rebuilding and interim pressure and system maintenance both to public, private and municipal utilities is a substantial mitigation subject the cost of which is not addressed.
- Response.** The costs associated with temporary and permanent relocation of affected utilities are included in the conceptual estimates which are based on initial investigation of facilities at the time the conceptual estimates were prepared. These estimates are based upon recent BART utility construction costs of the BART extension projects in Alameda County (Dublin/Pleasanton extension), Contra Costa County (Pittsburg/Antioch extension), and San Mateo County (Colma extension). Costs recorded from these projects become part of the BART Extension Program Financial management system and, combined with input from BART's utility specialist, form the basis for the conceptual cost estimates.
- 66.53. The cut-and-cover system would demand a complete new lift station and pressure systemization for the adjacent areas. The tunnel system could avert the lift station problem, but major protection and culvert restrengthening and rebuilding would still be a necessary mitigation cost to BART. The BART/EIR implies that the City would be absorbing this cost. The standard procedure is that if a system is operable as is, any impact which would render the system dysfunctional or inoperative is mitigated by the agency which renders the impact, not by the owner whose system was impacted by forces outside his sphere of control. BART must pay for this mitigation, not the City, not the Downtown merchants.

**Response.** Existing utilities would be maintained in place during construction of the cut-and-cover box whenever practical. If an existing utility cannot be maintained in place, it would either be reconstructed in the same location using materials and methods that would result in a utility that can be maintained in place or it would be relocated. All details of these efforts would be agreed upon to the mutual satisfaction of both BART and the utility owner. If a pump station is required, the City would be responsible for ongoing maintenance and operation.

- 66.54. We note that private property repair mitigation coverage [for settlement] is not specifically stated in this EIR, and must be for the protection of property owners and of the City from damage suits between the owners and BART.

**Response.** Section 13.9 of Chapter 3 in the DEIR/Technical Appendix discusses various settlement impacts and the mitigation methods that would be employed to reduce these impacts. In addition to these mitigation methods, BART will conduct preconstruction surveys of all buildings and structures along the alignment just prior to the start of construction. The condition of all buildings and structures will be recorded and noted for the record. During and after construction, the condition of these buildings and structures will be reviewed for damage caused by BART construction. At the same time, various instrumentation and survey monumentation will be monitored to detect settlement. If excess amounts of settlement are detected, construction techniques will be modified to correct the problem. If any damage is found that is a result of the BART construction, the damage will be repaired at no expense to the owner.

- 66.55. We note that vibrations of the pile driver magnitude, 0.10 inch even if damped by 50 percent will once or twice have no effect. But as a harmonic recurrence will both induce plaster cracks, tile cracks, sidewalk cracks, and like mild seismic events, set off car alarms and motion detector burglar alarms within a relative distance. A particular problem in this case will be City and private Utility flow alarms. A second major problem in this case is the security system detectors surveillance camera lens focus settings and thermostat systems of large commercial buildings such as Monti's Chevrolet-Geo Dealership and Artichoke Joe's. These entities could expect constant and repeated down time during 9 to 12 months at their locations. Residences nearer the Florida Avenue area could expect intermittent plaster cracking for 12 to 15 months.

**Response.** Where buildings will be close to pile driving, vibration monitoring will be performed by the environmental compliance monitor to determine whether vibration is within the Vibration Limits for Construction (see Table 3.13-14 of the Technical Appendix) which will be imposed upon the contractor by BART. These criteria are based on minimizing annoyance to nearby building occupants where construction vibration extends for several months. Vibration below BART's construction limits essentially precludes any building damage. It should be noted that pile driving is a common practice in downtown San Francisco, where tens of thousands of piles have been driven. Problems of the types noted by the commentator are not prevalent. It has not. Please refer to Response 66.98 for a discussion about buildings and alarms.

- 66.56. A written condition in the Mitigation Agreement should be stipulated as to vibration damage from any construction method.

**Response.** BART will follow the below procedure regarding potential vibration damage from construction. The procedure is to document pre-existing conditions of buildings near construction areas through inspection by a qualified firm prior to initiating construction. Claims of construction damage can then be investigated and compared with pre-construction conditions of the building in question. Vibration monitoring will be conducted by an environmental compliance monitor to document typical levels of groundborne vibration from construction activity when it is in close proximity to structures.

66.57. Constant hauling for disposal of spoils are anticipated by BART/EIR at 0.6 million (aerial plan) to 1.3 million (subway plan) cubic yards. Per the EIR this will generate between 50,000 to 500,000 truck loads of hauled dirt for the total Colma to SFIA job. San Bruno is not separately accounted for in the EIR.

**Response.** It is unclear which numbers the commentor is citing from the DEIR/DSEIS. Tables 3.13-4 through 3.13-10 of the DEIR/Technical Appendix indicate the amount of earth that would be displaced and the related number of truck trips for each alternative. Cubic yards of earth would range from 582,000 to 1,270,500; truck trips for this volume would total 35,600 to 77,000. These quantities have not been categorized by city. However, a rough estimate for truck loads of excavated materials by community is as follows: Colma 16,000 truck loads; South San Francisco 23,000 truck loads; and San Bruno 13,000 truck loads.

66.58. Many problems and omissions exist with the EIR for cost evaluation. The first EIR cost omission is that no comparative price is stated for the VI-Cut/Cover versus VI-Bored/Tunnel.

**Response.** Please refer to Response 17.68 for a discussion of the costs of bored tunnel construction through San Bruno.

66.59. The second EIR cost omission is that no specific mitigation cost accruals are listed or traceable for the myriad of municipal and private and state/federal agency potential BART impacts.

**Response.** Please refer to Response 17.68 for a discussion of the costs of mitigations required by the project.

66.60. After reviewing standard MTC/BART construction costs, we feel that the tunnel route cost used (\$16,000/l.f.) does contain enough for utilities, but that the cut/cover (\$8,000/l.f.) and retained cut (\$6,000/l.f.) portions at Tanforan and through Downtown are insufficient to cover the impacted utility system rebuilding.

**Response.** Please refer to Response 17.67 for a discussion of estimated utility relocation costs.

66.61. We note that the Cut-and-Cover Option has a greater utility mitigation liability than tunneling due to its intersection with both Tanforan and Downtown. The tunneling option interferes with the utility zone only at Tanforan, and goes under the utilities near Downtown. We also note that the mitigation for downtown property damage could be expected to be lower for the Tunnel Option since there would be no pile driving or surface dewatering which would cause increased settlement of public access pavements or of building components.

**Response.** The commentor's assertions regarding utility mitigation costs for the various construction options and the comment regarding costs of construction in downtown San Bruno are consistent with the cost estimates presented in the DEIR/SDEIS.

66.62. Not stated separately by the EIR, project cost for BART's own tunnels and tracks will be less for cut-and-cover by about \$12 million. The BART/EIR total Option VI system mitigation allowance is insufficient to cover even the San Bruno area joint utility needs.

**Response.** The mitigation allowance shown is considered to be adequate. At this level of conceptual cost estimating, mitigation is a function of total construction costs. The basis for the estimate is the experience gained from extensions currently under construction, adjusted to account for generally known and anticipated site conditions. As more specifics are identified through the

preliminary engineering process, a more refined mitigation figure will be prepared. Please refer to Response 66.105 for further discussion of mitigation costs.

- 66.63. We note that for Alternative VI, the depth of this cut-and-cover work (50 to 70 feet) at such a significant length and radius, is in excess of any such cut-and-cover installation on the BART System. BART admits that seismic tunneling studies are not yet part of the BART engineering provisions. We feel that similar studies for cut-and-cover must be extended to this scope of the BART work and provisions.

**Response.** The depth of cut-and-cover work is controlled by existing utility and drainage channel elevations, and therefore is independent of BART construction at other locations. Seismic studies will be completed as a component of preliminary design.

- 66.64. No mention of liquefaction effect by deep box structures on adjacent surface structures is made. In the Sylvan to Florida Avenue portion of Huntington Avenue, the underground car storage tail track boxes are at 60 feet below grade and are only 50 [feet] away from existing residences. This depth-proximity ratio places the residences within...both the 1 to 1 slope zone and the 2 1/2 to 1 slope zone, cross section zones wherein construction dewatering and seismic liquefaction can cause settlement or exacerbated local lateral spread. When so close to existing light structures, this must be reviewed and clarified and incorporated in the site specific studies for potential liability and mitigation under public review.

**Response.** Construction of deep box structures adjacent to light structures with shallow foundations would not increase the liquefaction potential of soils under the adjacent structures. Although the BART right-of-way may be within 50 feet of adjacent residences, excavation for the BART alignment would be shored to prevent settlement. In areas of minimum right-of-way width (less than 80 feet), excavation would be shored at a 90-degree angle to prevent disturbance to adjacent structures. The shoring of excavated areas would extend to the ground surface to provide sufficient work area on each side of the box. Please refer to page 3.13-3 of the DEIR/Technical Appendix under Cut-and-Cover Subway Section for further details regarding this type of construction and the cross section zones, within which dewatering and settlement could occur.

The deep box structure would be constructed by excavating the existing soils, shoring the excavation, constructing the concrete structure, and backfilling the area above the completed structure with compacted soils. As a result of the construction procedure, potentially liquefiable soils which exist in the area of the proposed box structure would be replaced by the structure and compacted soils. The deep box structure would be constructed to resist lateral earth pressures without excessive inward movement. Furthermore, the potential for seismically induced lateral movement of adjacent structures would be reduced by their proximity to the box structure, which would minimize the lateral movements of the adjacent soils. As described in the DEIR/Technical Appendix, Construction/Geology section, on page 3.13-109, under Impacts 2 and 3, adherence to Section 7.4.1 of BART's design criteria which includes considerations for settlement of adjacent structures, in conjunction with Mitigation Measure 3.1, monitoring program during construction, would reduce this potential impact to an insignificant level.

- 66.65. The EIR acknowledged the Foscardo '93 statements regarding local run off flooding (four feet deep by some observations) of the CalTrain tracks, Huntington Avenue, and nearby streets. The statement in the EIR that the fault lies with inadequate city drainage cannot...put the cost of BART equipment repair or clean up on to the City of San Bruno in the event of recurrent floods.

**Response.** The BART system will be designed to minimize potential damage from recurrent flooding. BART, however, will not improve existing substandard drainage within the responsibility of other agencies unless BART activities create a specific impact.

- 66.66. Regarding groundborne vibration impacts in San Bruno's Fifth Addition: Mitigation Measures 7.1 to place the BART tracks on resiliently supported ties or soft rail fasteners would be acceptable. However, Mitigation Measure 7.2 would probably be unacceptable. Measure 7.2 places the buildings on isolation pads (that is "off-site" mitigation) and would only protect individual buildings rather than the neighborhood. Furthermore such massive building retrofitting normally disrupts the building users for some amount of time....We also disagree with these statements [Vibration During Systems Operations, Item 3.9-VI.9.9.1 and 3.9-VI.9.9.2, page 3.9-82] which suggest the same mitigations for Lomita Park residences.

**Response.** Off-site groundborne vibration mitigation involving building isolation will be applied to affected lightweight buildings (e.g., residences), if this measure is selected by BART as the preferred mitigation measure. Accordingly, all portions of a neighborhood affected by significant groundborne vibration impact would be included. Please also refer to Response 66.10.

- 66.67. Line Construction Scenarios Discussion page 3.13-3 [of the DEIR/Technical Appendix]: The time to complete each type of line construction is indicated as 500 feet at grade per week, 100 feet retained cut and cut/cover per week, and 200 feet tunneled per week. We note that the EIR does not say if these rates are for only excavation or if they include concrete work and track work. The EIR should clarify this base schedule rate.

**Response.** The construction rates presented in the DEIR/SDEIS for each type of line construction address the site and structural work only and do not include the related street and utility work, or the installation of track and systems.

- 66.68. "Actual (utility) rearrangement will be done in accordance with the utility's standards and/or specifications and will be addressed on a case by case basis." This statement does not outrightly concede that utility is a full mitigation cost for BART's budget. Although we know that utility cost is included generally in the MTC/BART Line Construction Cost heading, that inclusion must somewhere be stated in this EIR. This same section also does not acknowledge the frequency of gravity flow storm drains crossing the BART route. There may be subsequent lift station requirements where the flow line is already quite close to sea level as in the San Bruno Segment.

**Response.** The cost of utility work is subject to agreements between BART and the utility owners. A detailed utilities study, including the frequency of encountering gravity flow lines, will be performed during preliminary engineering. Please refer also to Response 19.158 for a discussion of additional utility information.

- 66.69. EIR Tables 3.13-4 through 3.13-10b have three recurrent flaws which hinder public evaluation of their intent. These flaws are the inconsistency with which manhours, equipment hours and duration days are added and/or deemed "N.A." in the totals. Evaluation of community traffic and short term parking loads are not calculable without either the facts or a statement of the pertinent variables. This flaw has its main impact in the Transportation Section.

**Response.** Duration days were not added as footnoted in these tables. Systems/station equipment hours are small compared with the civil/structural work. The person hours and the equipment hours for each item in the first column of these tables needs to be evaluated against the associated duration listed. The durations are not totaled because some of these activities are concurrent at least part of the time. The volume of construction truck traffic has been estimated

based upon the quantities of the various construction materials or other activities. The largest volume activities are for hauling the excess earth excavated for the subway off the site. This work would average approximately five to ten trucks per hour and the peak number would be approximately ten to fifteen trucks per hour. Other construction activities requiring heavy truck traffic would be large concrete pours, such as base slabs or walls and roofs for the subway boxes. These pours would require approximately ten trucks per hour for concrete delivery over an eight to twelve hour period. The remaining truck traffic involves mainly delivery of various materials such as rebar, structural steel, fencing, etc. Those volumes would range from approximately one to five trucks per hour.

- 66.70. "Construction Activity south of I-380 would disrupt traffic on Forest Lane/Herman Street, and reduce parking on Huntington Avenue." Mitigation [Measure] 13.3 IV.4 may not be acceptable, dependent on schedule.

**Response.** Please refer to Response 17.71 for a discussion for mitigating impacts to Huntington Avenue, including the intersection with Forest Lane during construction of the BART-SFIA extension. Please refer to Response 17.69 for a discussion of provision of parking along Huntington Avenue during construction to mitigate impacts to businesses in downtown San Bruno near the proposed BART alignment.

- 66.71. [Transportation] Mitigation...7.1 [Deck Half the Streets] and 7.2 [Keep Adjacent Sidewalks Open] (page 3.13-39 [of the DEIR/Technical Appendix]) place steel deck over half the street and keep the sidewalks open as a mitigation which "would reduce impacts to an insignificant level." We disagree: Mitigation 7.1 nor 7.2 would be sufficient to maintain adequate traffic. No adequate mitigation is given or cost estimated.

**Response.** Page 3.13-39 of the DEIR/Technical Appendix states that Mitigation Measures 7.1 and 7.2 would reduce the impact of partial street closure, but the impact would remain significant and unavoidable. The document does not state that these measures would reduce the impact to below a significant level, as the commentator maintains. The amount of information provided on capital costs in the DEIR/SDEIS and in the FRDEIR/S#2DEIS was appropriate for review of a substantial number of alternatives and design options. Estimated capital costs were defined by use of BART's unit cost data base with information pulled from other BART extensions now under construction, and from the preliminary engineering completed on the BART Extension prior to publication of each document, and are believed to be accurate. It would not be appropriate or feasible to define the costs of a number of alternatives in greater detail than shown in these documents; more detailed cost analysis appropriately follows selection of an LPA.

This is because detailed engineering will provide the information necessary to define more complete cost estimates. The costs of mitigation proposed for the intersection (timber decking supported by steel beams) is included in the capital cost estimate for the project overall.

- 66.72. "At the San Bruno portal, the truck route with either San Bruno site would travel north on First Avenue, west on Angus, and northeast on San Mateo Avenue to Highway 101. The volume of trucks at these locations would not add significantly to existing traffic." We disagree. Construction traffic impact will remain very significant.

**Response.** The definition of significant traffic impact at local intersections is related to the decreases in the level of service at an intersection. The number of trucks through the intersections described would be too small to significantly decrease the level of service. The addition of 15 truck trips in each direction or 30 round-trip truck trips during the peak hour would not degrade the level of service at intersections along this suggested truck route that were all operating at LOS D or

better in all three analysis years under the No Build Alternative. The traffic conditions under the No Build Alternative were examined to assess the impacts of construction truck trips because these conditions exist prior to operations of the proposed BART extension.

The truck route to be used must be approved by local officials of the City of San Bruno. The route described in the DEIR/SDEIS was the best estimate of a possible route considered viable. An alternative truck route was described in the FRDEIR/S#2DEIS under the Alternative VI Aerial Design Option that also applies to Alternative VI. This truck route would travel north on First Avenue and then northeast on San Mateo Avenue to Highway 101. A mitigation to noise impacts for this construction route as described on pages 3.13-36 and 3.13-37 of the FRDEIR/S#2DEIS would be to have this route parallel First Avenue within the BART construction right-of-way until reaching San Mateo Avenue. Again, these truck routes are but one of the possibilities that include direct access from Highway 101 onto SFIA property. The trucks would travel on Huntington Avenue between San Mateo and Angus Avenue during construction of a cut and cover subway box adjacent to this portion of Huntington Avenue under Alternative VI and the Alternative VI Aerial Design Option.

In addition, BART, in cooperation with Caltrans is seeking to implement a truck haul route exiting plan that allows construction trucks to access Highway 101 ramps via temporary roads with minimal need to travel through the City of San Bruno streets. This route would only be effective for the duration of construction of the BART Extension.

66.73. [The DEIR/Technical Appendix states,] "Alternative truck access to Highway 101 could be provided via a temporary road from the contractor's laydown area to Highway 101. A temporary trestle or construction bridge 150 feet long would be placed adjacent to the wetlands." This alternate route would be acceptable if permitted by Biological Resources restrictions and their mitigations. That mitigation cost is not given, but must be considered prior to BART/MTC - City Agreements. Through-town routes as described [on page 3.13-50] would be totally unacceptable.

**Response.** Direct access to Highway 101 from the laydown area in the vicinity of Lion's Field would be preferable to the use of truck routes through local streets in San Bruno. However, this is dependent upon approval from Caltrans and from the U.S. Fish and Wildlife Service and the California Department of Fish and Game. Impacts resulting from through-town routes are discussed in Section 3.13.1, Construction/Transportation, of the Summary DEIR/SDEIS.

66.74. Land Use [Impacts] 3.13.VI.6, 7, 8, 9 page 3.13-65 [of the DEIR/Technical Appendix]: All these impacts listed are evaluated as unavoidable with cut-and-cover approach. Item -8's Impact muck load volume is partial and is significantly incorrect for use in public evaluation.

**Response.** The number of truck loads to remove the tunnel muck at the San Bruno portal is not partial or incorrect.

The third and last rows in the fourth and fifth columns of Table 3.13-10a on page 3.13-25 of the DEIR/Technical Appendix are modified as follows:

	Earthwork Cubic Yards	Number of Trucks
Earthwork	1,270,500 <u>1,204,500</u>	77,000 <u>73,600</u>
Totals	————— 1,204,500	514,960 <u>73,600</u>

66.75. Historically a very small local job increase is generated by BART projects, while out of state contractors hire out of county and out of state personnel. With present international trade laws, even foreign companies may now bid projects. [Item 12 on page 3.13-66 of the DEIR/Technical Appendix]...is irrelevant to BART, and is potentially incorrect and misleading.

**Response.** Employment benefit projections are based on Bay Area experience and ABAG's regional input/output model. BART contractors generally hire union workers, although BART contracts adhere to federally-regulated prevailing wage law, and agreements would normally require full employment of members of local unions before workers are brought in from other locations. For highly specialized work such as train control, a contractor may import expert labor from other domestic areas.

66.76. The EIR tunnel muck volume does not include the projected cut-and-cover tunnel entrance excavation volume for this truck traffic route. Furthermore, all these impacts are avoidable by the use of a bored tunnel scenario with the Single Laydown Area Plan wherein all tunneling is accomplished from the Millbrae laydown site. (Ref: pg. 3.13-9 [of the DEIR/Technical Appendix])

**Response.** The projected cut-and-cover tunnel entrance excavation volume is included in the cut-and-cover volume for the remainder of the project. The second option, using two laydown areas, one in Millbrae and the other in San Bruno, would reduce the duration of tunnel excavation by approximately one-half. Tunneling one direction from the Millbrae site would increase the excavation duration.

66.77. Several significant burial mounds are thought to exist or to have existed in the SFIA wetlands vicinity. Confirmation is difficult without some investigation. Potential mitigation cost and schedule impacts could be from \$30K to \$900K for reburials. Alternate mitigation would only come from bore tunneling beneath the entire Wetlands property.

**Response.** Although it is generally accepted that Native American sites in the San Francisco Peninsula include human burials, a number of cultural resources reconnaissance surveyors in the proposed corridor were unable to locate prehistoric remains (see Archaeological Survey Report, page 9). This may be the result of the high level of disturbance to ground deposits in the project corridor. This obviates the need for a specific "line item cost" in the DEIR/SDEIS. Consideration of potential impacts to resources is included in Mitigation Measure 2 (page 3.4-8, last paragraph, Summary DEIR/SDEIS - as revised). Please also refer to Responses 12.4 and 16.3.

66.78. Page 3.13-95 [of the DEIR/Technical Appendix]: Mitigation of damaged historic structures by cited Measure 5.1 rarely cures the problems and damage caused. They just provide documentation. Mitigation repair costs must still be part of the general statement and City-BART/MTC Agreement for private property mitigations.

**Response.** Since development of the draft environmental documentation, BART has completed the Finding of Effect and applicable Memoranda of Agreement for properties which are eligible for the National Register of Historic Places. The Memoranda of Agreement include commitment to preservation, restoration, and enhancement of affected resources which must be implemented as a condition of federal project approval. The costs for committed mitigation to effects to historic structures have been taken into consideration in the project budget.

66.79. These [cultural resource] mitigation costs have been unstated throughout the EIR, which constitutes an incomplete and unapproved document.

**Response.** The cost of carrying out the mitigation measures related to historical resources throughout the project corridor is included in total project costs under the "right-of-way" line item. The sites that may require mitigation measures include the cemeteries, a prehistoric site (CA-SMA-299), and the cut stone bridge in South San Francisco.

66.80. Community Services (Emergency Response)...page 3.13-99 [of the DEIR/Technical Appendix]: Measures 1.1 and 1.2 would not reduce this impact to an insignificant level. Based on our studies of adjusted traffic impact delays, the impact to emergency services would be potentially unacceptable by the cut-and-cover impact levels.

**Response.** Perhaps the commentor has inadvertently cited an incorrect page reference. On page 3.13-99, only one mitigation measure is indicated, not two as suggested. With sufficient prior coordination, impacts of delayed response times would be minimized. However, there may be instances when this would not be possible. Accordingly, the DEIR/SDEIS reports that the impact would remain potentially significant. This conclusion appears to be consistent with the commentor's point.

66.81. Community Services (Emergency Response) Item 3.13.VI-Tunnel-Option, page 3.13-100 [of the DEIR/Technical Appendix]: We disagree with the conclusion. Tunnel construction would have a very different impact, much less.

**Response.** In general, tunnel construction is expected to have lesser impacts than cut-and-cover construction because there would be less disruption of the street surfaces. Nevertheless, Table 3.13-2 on page 3.13-10 of the DEIR/Technical Appendix indicates that there is relatively little difference in terms of street restrictions between the two construction techniques. The key distinctions appear to be San Bruno and Huntington Avenues. In both cases, alternate routes would be available in the vicinity that could function as emergency access routes. As a result, the EIR/EIS preparers do not believe that the conclusion arrived at on page 3.13-100 requires modification. Please refer to Responses 17.68 and 66.115 for further discussion of impacts associated with the tunneling option.

66.82. Downtime is unacceptable as is customer notice for most of the businesses served opposite Tanforan and west up Sneath Boulevard., or in the Bayhill area, since these establishments are medical clinics and utility-dependent food services. Timing of disruption is possible if not disrupting adjacent residential areas instead.

**Response.** Sneath Boulevard businesses should not be affected by the BART extension. Please refer to Response 17.84 regarding efforts BART will take to minimize utility disruptions.

66.83. Page 3.13-105 & -106 [of the DEIR/Technical Appendix]: The Mitigation, 1.1 and 1.2, would not reduce these impacts to insignificant levels. BART/EIR has not accounted specifically enough for the following interferences or their mitigation costs in what the EIR states to allow adequate public evaluation or acceptance. We have estimated what line construction costs should reflect if utilities were included in that cost system and we do not feel that adequate moneys are reflected by those figures either.

**Response.** The DEIR/SDEIS indicates that utility lines would be disturbed and that service interruptions may occur. Specific lines and locations have not been delineated since this

information will be collected during preliminary engineering. The mitigation measures identified in the DEIR/Technical Appendix, beginning on page 3.13-102, apply regardless of the specific lines affected. These measures would be developed in greater detail with the utility owners, and would reduce service interruptions to an insignificant level. The cost for relocation or replacement of utilities will be negotiated between BART and the utility provider. It is not clear what mitigation costs the commentor believes would undermine public acceptance of these measures. BART includes utility work in its cost estimates.

- 66.84. We note that the proposed CalTrain shoofly will lie atop the PG&E gas line and the airport fuel line. This proximity may allow only one shoofly track instead of two tracks. A single track scheme would worsen the cost impact to SPTCo and CalTrain for the one year shoofly duration. The scope of impact and their Mitigation Costs are insufficiently documented in this BART/EIR to facilitate public evaluation. Those impacts and costs as paid by BART must be reviewed with the City prior to any Project Evaluations or Approvals.

**Response.** The DEIR/Technical Appendix acknowledges that Alternative VI would reduce CalTrain service to a single track (see page 3.13-51), however this does not imply a shoofly. The resulting disruption of CalTrain service is identified as an unavoidable significant impact. The analysis provides full public disclosure of the magnitude and severity of the impact. BART will continue to coordinate with the Joint Powers Board and SamTrans on measures to reduce impacts to CalTrain service. The costs of single tracking CalTrain is included in the capital costs. Please see Response 47.17 for a discussion of the level of detail available in the conceptual cost estimates. Any proposed shoofly construction would be located clear of gas or fuel lines. Gas and fuel lines would be relocated, if required.

Conceptual estimates carry a sizable contingency which is standard engineering practice. As detail design evolves, and new cost items are identified, the new costs are deducted from contingency.

66. 85. Page 3.13-118 [of the DEIR/Technical Appendix] "As excavations occur for below grade segments and facilities...lateral ground deformation and settlements may occur behind the excavations. Adherence to BART design criteria in conjunction with a monitoring program during construction would reduce this impact to an insignificant level..."...Page 3.13-109: "...implementation of monitoring program during construction would be necessary to ensure that ground settlement do not exceed acceptable limits." We note that disclosure of the "acceptable limits" must be made, without which this mitigation potential cannot be adequately evaluated by this public review, nor approved. In the event that BART's "acceptable limits" for Construction in Soil Type 4, liquefiable fill, do not yet exist, then City review and acceptance of these developed limits must be a condition of the City Agreements.

**Response.** Acceptable limits of excavation-induced settlements will be based on site-specific geotechnical studies performed during final design of the project, and on local conditions, including those areas where Soil Type S4 exists. Established settlement limits will be enforced during construction.

- 66.86. We note that pile driving has been known to excite liquefaction symptoms in some soils. Colma Formations as found under Downtown San Bruno along Huntington Avenue and under Artichoke Joe's are considered solid with low liquefaction potential. Directly opposite, along First Street, the liquefiable fill under the residences is a high liquefaction potential. Specific mitigation cost or procedures or repairs were not addressed in the EIR, but should be addressed.

**Response.** Pile driving has been known to cause liquefaction in some types of soils. Installation of piles for support of permanent structures is not planned in the vicinity of First

Avenue for any alignment alternative under consideration. Installation of soldier piles for temporary excavation support may be required in the vicinity of First Avenue; however, these are most commonly installed in pre-drilled holes, thus eliminating vibrations associated with pile driving. Mitigation measures for noise and vibration associated with pile driving in San Bruno are discussed on pages 3.13-169 through 3.13-170 of the DEIR/Technical Appendix. Pre-drilling, where feasible, will be required.

- 66.87. Mitigation Measure 5.2: page 3/13-111 [of the DEIS/Technical Appendix]: "Monitoring Program During Construction: During construction a monitoring program would be implemented by BART to monitor ground displacements as tunneling progresses, and to allow for mitigation of these displacements." "...We must be told what that mitigation will cover and what "acceptable limits" for Construction in Soil Type 4, liquifiable fill, do not yet exist, then City review and acceptance of these developed limits must be a condition of the City Agreements.

**Response.** Please refer to Response 66.85 for a discussion of acceptable limits of settlement. Based on acceptable limits of settlement relating to tunnel design, appropriate construction techniques will be used to mitigate ground displacements.

- 66.88. Page 3.13-144 [of the DEIR/Technical Appendix]: "Construction of Alternative VI would disturb endangered species habitat and may result in a loss of individual endangered species..." This statement [Impact 5 on page 3.13-144] is misleading. We note here that the elevated road to Highway 101 might allow the endangered species free site access, the Federal Government Agencies have not yet been consulted on this plan's acceptability. We cannot count on this as an accepted alternate. This statement [that use of the portal entry and tunnel boring launching area of Options 1 or 3 for Alternative VI would avoid disturbing the SFIA property west of Highway 101] is also incorrect. We note here that the tunnel boring launch site at Options 1 or 3 do not really avoid the Wetlands. The VI Alternate still has a significant area of excavation into the wetlands area (1 1/2 acres).

**Response.** The text of the DEIR/Technical Appendix is revised on page 3.13-144, Impact 5, by inserting "member of" between "individual" and "sensitive." The document does not state that any of the alternatives have been "accepted" nor that the agencies have been consulted on all aspects of the proposed alternative.

Page 3.13-144 of the DEIR/Technical Appendix indicates that "Options 1 and 3 would avoid disturbing the SFIA property west of Highway 101" and not the wetlands as stated in the comment. However, on pages 3.13-142 and 3.13-143, there are correct statements that Options 1 and 3 would not disturb any wetland habitats on the west of Bayshore parcel. There is no "significant excavation" of 1.5 acres of wetland areas associated with Alternative VI.

- 66.89. We note that... [Mitigation Measures 2.1, use of sediment basins or tanks, and 2.2, use of slurry and/or sheet pile shoring walls, on page 3.13-123 of the DEIR/Technical Appendix] retain the following flaws. Sediment tanks will not remove chemical contaminants within the silts and dewatering fluids. Conversely, slurry walling and pile driving will produce ground vibration impacts to adjacent structures (if within a few hundred feet).

**Response.** The referenced impact and mitigation measures address "elevated silts and sediments," not chemical contaminants. There is no reliable information to suggest that excavated materials would consist of chemical contaminants or hazardous materials. However, if such a problem were to occur these materials would be managed and disposed of in an appropriate manner. Vibration impacts of pile driving are discussed in Section 3.13.12, Noise and Vibration, and in Responses 12.6 and 66.55 above.

66.90. We note the EIR does not here [on page 3.13-123 of the DEIR/Technical Appendix] mention that the earlier referenced CFR, NPDES, SWRCB and RWQCB standards must be met: BART must include additional mitigation of chemical contaminant removal and safety levels.

**Response.** Construction activities will be required to adhere to the existing water quality standards established by the Regional Water Quality Control Board in accordance with an NPDES permit.

66.91. We note here that these mitigation measures [Mitigation Measures 3.1, use of watering trucks, and 3.2, erosion control plan on page 3.13-124 of the DEIR/Technical Appendix] are only partial. The Erosion and Dust Control watering truck frequency must be linked to the Air Quality Section, 13.3, and the governing BAAQMD and SCAQMD regulations and recommendations for allowable fugitive dust quantities.

**Response.** The air quality impacts of construction activities and proposed mitigations are discussed on pages 3.13-197 to 3.13-206 of the DEIR/Technical Appendix. The twice-daily watering of disturbed surface areas called for in Mitigation Measure 3.1 on page 3.13-124 will minimize dust and surface erosion from wind and vehicle travel, and is the same as the twice daily watering portion of the Best Construction Practices described in Mitigation Measure 1.6 on pages 3.13-199 and 200 of the DEIR/Technical Appendix. The erosion control plan called for in Mitigation Measure 3.2 on page 3.13-124 is intended to minimize surface erosion from water flow and is unrelated to air quality. A more detailed discussion of erosion control mitigation measures than that on pages 3.13-124 and 125 can be found in Section 3.13.11, Construction/Hydrology.

66.92. [Mitigation Measures 3.1 and 3.2 on page 3.13-148 of the DEIR/Technical Appendix], i.e., dry season construction and maintaining unobstructed drainage ways...would be ineffective for the shallow ground flow which occurs even during seemingly dry seasons.

**Response.** Concerns regarding shallow ground water flow in construction areas are addressed in the DEIR/Technical Appendix on page 3.13-107 under Geology, Soils and Seismicity, Mitigation Measure 1.1, and on page 3.13-147 under Hydrology and Water Quality Mitigation Measure 2.1.

66.93. Water quality of the dewatering discharges and of accidental chemical spill are not addressed in this section [Section 13.11 of the DEIR/Technical Appendix] beyond quoting the obligatory NPDES permit levels.

**Response.** Please refer to Response 3.8. Testing of dewatering fluids is addressed by Mitigation Measure 4.1 on page 3.13-149 of the DEIR/Technical Appendix. Contamination existing in the shallow perched aquifers along the alignment will be identified by the project-specific geotechnical investigation and monitored during construction. If perched water enters the excavation during construction, it will be tested and discharged in an appropriate manner.

66.94. Testing of the dewatering fluids ("profiling") must be accomplished as a part of NPDES permits and will prove if the dewatering fluids can even be locally discharged or must be trucked off site. Prior to agreements, discussion regarding which levels of permit cleanliness should be licensed for possible local discharge must be addressed. There are many low income residents who may be using well points to irrigate their private vegetable gardens. These people would be impacted if the wrong level of water quality were permitted.

**Response.** Please refer to Response 66.93 for a discussion of testing of dewatering fluids.

66.95. Mitigation Measures 2.1...[use of sedimentation basins or tanks, for Impact 2 on page 3.13-14 of the DEIR/Technical Appendix] may be insufficient. Testing of the dewatering fluids ("profiling") must be accomplished as a part of NPDES permits and will prove if the dewatering fluids can even be locally discharged or must be trucked off site. Prior to agreements, discussion regarding which levels of permit cleanliness should be licensed for possible local discharge must be addressed.

**Response.** Please refer to Response 66.93 for a discussion of testing of dewatering fluids.

66.96. Some significant proof must be offered that BART's criteria for vibration damage avoidance is effective in the preferred 100 foot distance from construction work to buildings as well as where BART admits to 20-50 foot distances.

**Response.** Construction vibration limits are set to minimize short-term annoyance during construction. Vibration below BART's construction limits preclude any building damage. Please refer also to Responses 29.40 and 66.55.

66.97. We note similarly that the nine BART-cited "noise and vibration control measures" (page 3.13-161 and 162 [of the DEIR/Technical Appendix]) do not address vibration, they only address noise.

**Response.** Although the measures indicated on page 3.13-161 of the DEIR/Technical Appendix use the word "noise," they are, for the most part, equally adaptable to vibration control. To clarify, the following text is added to page 3.13-162, following the ninth noise and vibration criterion in the DEIR/Technical Appendix:

The above listed noise control measures are, for the most part (e.g., Numbers 1, 4, 5, 7 and 9), equally adaptable to vibration control. Other specific mitigation measures for reducing ground vibration during construction are discussed where potentially significant vibration impacts are identified (e.g., pile driving).

66.98. We note that these cited impact neighborhoods [on pages 3.13-167 and 3.13.168 of the DEIR/Technical Appendix] are the same as would be cited in Alternative VI, and are only for residential areas and impacts and mitigations. The severe vibrations which will affect commercial security and thermostatic control systems must also be addressed by BART. We note also that these impact mitigations only address lessening the source, which is agreeably the optimum solution. BART must also address operational damage inducing vibratory limits and mitigations.

**Response.** BART's design throughout its 72-mile system has prevented the concerns raised by the commentator regarding vibration effects caused by its operations. Similarly, BART expects that there would be no severe vibrations caused by the proposed extension, particularly with implementation of the recommended mitigation. With regard to commercial security and thermostatic control system concerns, thermostatically controlled systems are controlled by temperature, not vibration. BART train vibrations will not affect commercial security systems, which generally respond to entry violations, fire, and internal movement (motion) security.

Street traffic and CalTrain passenger service already create substantial levels of vibration without any apparent adverse effects. In general, security alarms are not affected by low level vibration that would result from BART operations. However, during construction, the contractor, when working in the vicinity of commercial operations that have security alarms, may need to address minimizing ground vibration so as not to set off alarms. Typically, this would only be a problem, if at all, at night.

66.99. The use of predrilled piles and hydraulic pile drivers could reduce the impacts adequately in the Fifth Addition due to the distance between the tracks and the homes. The use of this mitigation will not probably be adequate in the Belle Air or Lomita Park areas, due to these areas' homes closeness to the work.

**Response.** In general, where residences are nearby construction activity, noise or vibration impacts would occur and mitigation such as temporary sound walls, or alternative pile installation methods would be required. Please refer also to Responses 29.40 and 66.55.

66.100. We note that the cited 13.12.VI.14 is for Millbrae Impacts, but would be the same impacts felt by Downtown San Bruno for the bored tunnel. The same mitigations both for the Euclid Avenue residences and for the vibration sensitive security systems of Monti's Chevrolet and of Artichoke Joe's Card Room. Assurance of these mitigations during the Bored Tunnel construction must be part of any City agreement with BART.

**Response.** The bored tunnel construction vibration impacts would be short-term. BART would give notice to local residents and business. In cases where impacts are anticipated, residents and businesses could make necessary plans during this period of time.

Assuming each tunnel boring machine (TBM) advances 40 feet per day on average, it would take approximately five days for each TBM to travel from a point 100 feet to one side of the area of concern to a point 100 feet on the other side. Even though the TBMs may both be excavating at the same time, there would be several hundred feet separating the actual working face in each tunnel due to the staggered start times anticipated for this work.

Tunnel excavation is anticipated to advance at an average daily rate of 40 feet per day per tunnel. At this rate, it would take approximately five days, or one week, for each tunnel boring machine to pass from a point 100 feet north of a sensitive receptor to a point 100 feet south of the receptor. The times when the tunnel boring machines would be in close proximity of sensitive receptors would be closely coordinated between BART and the owners of the sensitive receptors.

66.101. We also note and question what the Table [3.13-18] line item means by "with relief track" versus "with Tunnel Option"? Was there a plan without the relief tracks under San Bruno's Lomita Park, or is this at Millbrae?

**Response.** On page 3.13-205 of the DEIR/Technical Appendix, Table 3.13-18, the first and third rows in the first columns are revised as follows:

With Relief Track Cut-and-Cover Construction

66.102. We also note that BART's fugitive (dust) figure may be low since the BART quantities elsewhere for excavations have been incomplete.

**Response.** The calculation of fugitive dust emissions during construction activities employed an emission factor with units of tons of particulate matter emitted per acre of disturbed area per month (ton/acre/mo). In other words, predicted fugitive dust emissions are determined not as a function of the volume of excavated soil, but instead as a function of the area of disturbed ground surface. Please refer to the Air Quality Technical Report, Section 3.1, for a detailed description of the construction emissions calculations.

66.103. We note that BART has not cross referenced several subjects under Biology and Hydrology Chapter 3. Sections 13.10 and 13.11 are relevant here, regarding water and wind driven soil erosion (13.10.LPA.3, page 3.13-124 [of the DEIR/Technical Appendix] and the quality of dewatering discharge water (13.11.VI.3, page 3.13-155).

**Response.** All subjects under Biology and Hydrology in Section 3.13 of the DEIR/Technical Appendix were not cross-referenced in order to maintain the distinction between the short-term construction impacts and long-term operational impacts associated with the proposed BART extension.

66.104. The bulk of the BART/DEIR Chapter [6] deals with the financing of the project, rather than the cost analysis. Consequently, certain other information will need disclosure and verification prior to public evaluation and city approval.

**Response.** Please see Responses 13.2 and 14.93 for a discussion of estimated capital cost estimates and the financial plan included in the DEIR/SDEIS.

66.105. The second EIR Cost omission is that no specific mitigation cost accruals are listed or traceable for the myriad of municipal and private and state/federal agency potential BART impacts. These impacts include utility relocations, traffic reimbursals, wetlands encroachment mitigation, prehistoric site impact mitigation, emergency services access impedance mitigation, public and commercial access/parking relocation mitigation.

**Response.** Regarding mitigation cost estimates for non-BART agencies, funds for mitigation of certain impacts are included in the conceptual cost estimates seen in Table 6-1. The cost estimates for utility relocations under, near, and over the BART alignment and stations are included in right-of-way costs. In general, municipal and private utilities will not have any unreimbursed costs associated with the project. Traffic control installation costs, as well as emergency, parking, and commercial access routes are included in right-of-way and line costs. Wetland impact mitigation is included under environmental mitigation and right-of-way. All cultural resource mitigation costs are included in the right-of-way costs. A specific figure cannot be assigned to account for mitigation of all possible impacts. The Contingencies and Reserves line item of the conceptual cost estimates also includes funds that can be used to cover the costs of legitimate, unexpected mitigations.

66.106. Utility rebuild cost have been included in the "Line Construction Costs" according to BART's estimation process. After reviewing standard MTC/BART construction costs, we feel that the tunnel route cost used (\$16,000/l.f.) does contain enough for utilities, but that the cut/cover and retained cut portions at Tanforan and through Downtown are insufficient to cover the impacted utility system rebuilding.

**Response.** Please refer to Response 17.67 for a discussion of estimated costs of utility relocations.

66.107. There is a correction to the figures contained in Table 6 of Attachment 2....The cost for a bored tunnel is thus approximately \$12 million higher than cut-and-cover (in the original report prepared by A.J. Moore Associates, the figure was \$1,308, or approximately \$8 million less to bore the tunnel vs. cut-and-cover). The corrected figures do not change the essential point made in our comments in reply to the DEIR/SDEIS, to wit, that bored tunnel construction is affordable, viable and should be included in Alternative VI....

**Response.** The estimates used for the construction amounts in Table 6-1 on page 6-2 of the DEIR/Technical Appendix indicate a bored tunnel cross section is more expensive than a similar cross section of cut-and-cover. Comparing a cut-and-cover alternative total construction cost to the bored tunnel of Alternative VI is not appropriate because the line lengths are different. The bored tunnel is the longest of the alternative alignments by approximately 0.9 of a mile.

Please refer to Response 17-68 for a more detailed discussion of the economic and environmental effects of the bored tunnel option.

- 66.108. Why doesn't the tunnel option -- if it really is viable and intended as an option by BART -- have a designated number, such as Alternative VI-A? (That is, why isn't it accorded the same prominence as Alternatives V-A and V-B?)

**Response.** The Tunnel Construction Option through San Bruno under Alternative VI is an optional method of constructing the subway alignment from Euclid Avenue to north of Sylvan Avenue through downtown San Bruno. Under Alternative VI, the alignment from Euclid Avenue to north of Sylvan Avenue is also subway but it would be constructed using a cut-and-cover technique. In both cases, the operational result is a subway alignment through downtown San Bruno.

"Design options" were given a number/letter classification in the DEIR/SDEIS because they follow a different horizontal or vertical alignment than a basic alternative. For example, Alternative V is minimum length subway through downtown San Bruno which rises to grade near Cupid Row in the SPTCo/CalTrain right-of-way to an intermodal station near Center Street in Millbrae. In contrast, Design Option V-A is a Minimum Length Subway to Airport Ground Transportation Center, which, south of the San Bruno Armory, follows a different alignment than Alternative V, which curves east and south in subway to the Airport's GTC.

No "construction options" were given a number/letter in the DEIR/SDEIS. For example, there are two construction options for the tunnel construction laydown areas under Alternative VI, described in the DEIR/Technical Appendix on page 3.13-9. The construction options are 1) a single laydown area at the proposed Millbrae Avenue Station site, and 2) two construction laydown areas, one at the Millbrae Avenue Station site and another at either south of Cupid Row Canal and east of the CalTrain right-of-way or Lion's Field Park.

- 66.109. Page 2-78 [of the DEIR/Technical Appendix], Table 2.3-1. What is the meaning of "thousands of dollars at mid-point of construction (1996)"? What does mid-point mean? Is this half of the construction cost? The amount spent as of the half way point? The amount of money calculated in 1996 dollars? What does this mean? What are the real costs? This should be clarified, so people know what their economic obligations are, and so they can assess how much money to raise and/or appropriate for this project.

**Response.** "Costs at mid-point of construction" requires inflating each element's costs to its own mid-point of completion. For instance, costs for purchase of right-of-way, completed in, say, the first two years of the project, would be inflated for one year, not to 1996. "Costs in 1996 dollars" are calculated by inflating the entire project cost from current dollars to 1996 dollars at a fixed, assumed rate of inflation. Since not all construction activities are studied, the midpoint of construction (equal to half the total construction duration) averages the total cost of escalation.

Please also refer to Response 24.6 regarding costs at the mid-point year of construction.

66.110. Page 2-78 [of the DEIR/Technical Appendix], Table 2.3-1. Where is the cost estimate for the tunnel option to Alternative VI? This should be fully discussed so everyone knows what this option will cost and so they can determine whether it is economically feasible. Page 2-80, Figure 2.4-1. Where is the tunnel option to Alternative VI?

**Response.** Please refer to Response 17.66 for a discussion of the cost of constructing the tunnel construction option in San Bruno.

66.111. Page 3.1-19 [of the DEIR/Technical Appendix], Table 3.1-8. Passenger projections for CalTrain to San Francisco International Airport for Alternative V-B and VI are identical. Alternative V-B is an intermodal station where a CalTrain user can make one transfer on the ALRS to the Airline Terminals or an employee going to work versus Alternative VI that requires two transfers from CalTrain to BART to ALRS. In our opinion the extra time would discourage many transit commuters, and this difference should be discussed in connection with the assessment of these two alternatives.

**Response.** Table 3.1-8, Daily Trips by Mode to SFIA, in the DEIR/Technical Appendix indicates that the number of trips to the SFIA on BART are similar among all BART build alternatives. The number of trips among the build alternatives would vary by up to 200 trips in 2010 and 100 trips in the other two analysis years.

The travel time to various destinations within the airport would be very similar among the BART build alternatives. Under Alternative VI, individuals traveling from the north would ride a BART train to the International Terminal at the SFIA and then either walk to their airport destination or transfer to the ALRS. Individuals traveling on CalTrain from the south to the SFIA would, under Alternative VI, transfer to BART at the Millbrae Avenue Station and ride BART to the Airport International Terminal Station. These riders from CalTrain would again either walk to their airport destination or transfer a second time to the ALRS.

Of all persons traveling on BART to the SFIA, about ten percent would require the double transfer from CalTrain to BART and then to the ALRS in Alternative VI. Under Design Option V-B, all individuals traveling from the north or the south would need to transfer at the San Bruno BART station to the ALRS to travel to the SFIA. The transfer to the ALRS at San Bruno would be an inconvenience for those individuals traveling from the north under Design Option V-B who could have walked to their final destination under Alternative VI. The individuals traveling from the south on CalTrain would need to ride to San Bruno before transferring to the transit system that takes them to the airport rather than transferring at Millbrae which saves several minutes. The differences in travel times to various airport destinations among the BART build alternatives would be small and can be measured in several minutes. This difference accounts for the similarity in the daily trips to the SFIA among the BART build alternatives. Please also refer to Response 11.2.

66.112. Page 3.1-184(2) [of the DEIR/Technical Appendix], Mitigation Measure 2.1. Parking permits in residential areas are stated to reduce the impact to an insignificant level. However, enforcement of this program will cost the City and residents additional taxes to patrol. This may well be very significant as well as an inconvenience to the residents. This should be discussed.

**Response.** Please refer to Response 19.9 for a discussion of BART's ability to pay for community services on a federally funded transit project. Typically the cost of enforcement is offset by the imposed fines. If the imposed fines are low, few violations occur which translate to more available residential parking space.

66.113. Page 3.1-184(3) [of the DEIR/Technical Appendix] Mitigation Measure 3.1. States that barriers will discourage BART users from parking on Tanforan Shopping Center lots. We disagree. People will walk the short distance. We would like to see studies of similar conditions elsewhere. The specific concern that needs to be addressed is whether there will be overflow parking that spills out of the BART lot and into the Tanforan or Towne Center Shopping Centers.

**Response.** Please refer to Response 66.19 for a discussion of parking impacts on the Towne Center Shopping Center and to Response 241.9 for a related discussion of overflow parking at the Tanforan Park Shopping Center.

66.114. Page 3.2-19 [of the DEIR/Technical Appendix] San Bruno General Plan Circulation Element (Policy 8/Action 8A) states that the BART route should minimize negative impacts to existing developments. Our position is that anything short of a bored tunnel will impact existing developments and neighborhoods significantly.

**Response.** The Circulation Element Policy refers to long-term impacts on existing development. By avoiding at-grade alignments, BART would not permanently affect circulation patterns in San Bruno. Phased construction will be utilized to minimize construction period impacts on circulation.

66.115. The comparative impacts of a cut-and-cover vs. a bored tunnel through San Bruno should be thoroughly discussed, as one as opposed to the other will have dramatically different impacts on the San Bruno community.

**Response.** The long-term impacts of the methods of constructing a subway, or a bored tunnel subway are the same. The surface area above the subway would be returned to its original condition and use. There would be no surface evidence of the subway except for ventilation shafts which project above ground approximately every 3,000 to 4,000 feet. If sensitive building foundations are close to the subway, groundborne vibrations will be damped in accordance with the BART noise and vibration criteria.

The short-term construction impacts of the two methods would vary:

*Cut-and-Cover Construction.* Section 13.2, Construction Scenario, of the DEIR/Technical Appendix, provides a general discussion of the methods. The major short-term construction impacts and mitigations are discussed in the following sections:

Noise and Vibration, Sections 13.2: Noise and vibration would be generated during pile installation, which is required to support the excavation faces and the heavy construction excavation and haul equipment. The specific impacts and mitigations are discussed in Section 13.2.

Transportation, Section 13.3: Construction activities would impact many streets and parking areas. BART proposes to maintain two-way traffic on all streets (except Olivet Parkway) through the use of temporary decking over the construction trench in accordance with agreements and permits issued by the cities. The temporary decking would allow traffic to continue to flow on the decking while excavation and construction continued in the trench below. Construction sequencing and temporary decking would limit the impact on parking areas. Haul routes through urban areas will be the subject of agreements and permits by local jurisdictions.

Land Use, Section 13.4: Construction activities would impact neighborhood activities, businesses, and the cemeteries in Colma.

Utilities, Section 13.8: Cut-and-cover construction would require significant work to re-route utilities around the trench or to support the utility lines in place over the trench. Utility service will be maintained in all cases except for minor disruptions to hook-up new lines or connections.

*Tunnel Construction.* The primary benefit of tunnel versus cut-and-cover construction would be the reduction of impacts on the surface and the reduced volume of earth material to be hauled away. The primary disadvantage would be the higher cost of the specialized machinery and slow construction speed.

The impacts discussed above under noise and vibration, transportation, and land use would be reduced by tunnel construction. However, the remaining impacts would be concentrated at a tunnel mobilization site where the excavated tunnel material would be brought to the surface, stored, and loaded on trucks for disposal, and all incoming tunnel liners, materials, and supplies would be received and stored. These impacts will be mitigated by controls on dust, water quality, noise, working hours, and the installation of barrier walls.

An issue also discussed in the DEIR/SDEIS is surface settlement above the tunnels. The expected settlement directly over the tunnels would be 1 to 2 inches, which would gradually decrease to 1 inch approximately 75 feet from the tunnel. This amount of settlement is typically not noticed on the surface. In some cases, minor repairs to pavements and utilities could be required. Soil conditioning by grouting is one mitigation that would be used to minimize settlement in critical areas.

- 66.116. Page 3.2-49(8) [of the DEIR/Technical Appendix] states that a downtown station would weaken the central business district, but on p. 3.2-1 in the introduction it says that a station can stimulate land development and foster economic activity. These two pages have conflicting conclusions. Are these reconcilable? If not, which one is correct?

**Response.** Page 3.2-1 of the DEIR/Technical Appendix contains a general statement about the long-term potential of a station to affect land use, such as the type of office commercial development that has occurred in the vicinity of the Walnut Creek and Concord BART Stations. The statement on page 3.2-49 describes the impact of removing Artichoke Joe's, the most intensive employment activity in the downtown areas. Removing the employees and customers of Artichoke Joe's would weaken the downtown retail district.

- 66.117. Page 3.2-50(9) [of the DEIR/Technical Appendix]. If a station can foster economic activity and development as well as provide additional tax revenue per page 3.2-1, then would this offset the tax loss to the City and School District? The bottom line economic impact should be assessed in the DEIR so the City of San Bruno can determine if there will be a net gain or a net loss in revenues after this project is built. The massive impact on tax revenues is an issue of utmost importance to San Bruno, and it should be addressed in the DEIR. There is no discussion with any specificity contained at present.

**Response.** Please refer to Response 66.39. Impact 9 on page 3.2-50 of the DEIR/Technical Appendix referred to the potential impacts of Alternative V. Neither Alternative VI nor Alternative VI Aerial Design Option would dislocate homes or a significant number of businesses in San Bruno and therefore should not have adverse fiscal impacts on the city or school district.

66.118. Page 3.2-53(7) [of the DEIR/Technical Appendix]. What studies and similar conditions back up the conclusion that BART will increase the customer flow? Supporting authority should be cited. We are not at all certain that this statement is really supported by the record in other locations (i.e., see the development adjacent to the El Cerrito station).

**Response.** Several shopping centers and major department stores have developed direct mezzanine access to BART stations including the San Francisco Center (Nordstrom, etc.) and the Emporium in Oakland. The College Avenue commercial strip in Oakland seems to thrive adjacent to the BART Rockridge Station. There are many examples of mezzanine and street level retail outlets at transit stations in Toronto and Montreal, and several Washington, D.C. Metrorail Stations are located adjacent to major retail centers (such as Crystal City). It should be noted that development potential of the area adjacent to El Cerrito's station has been affected by the opening Hilltop Mall rather than the BART station.

66.119. Page 3.2-55 [of the DEIR/Technical Appendix], Section 2.4, Acquisition and Displacement, Impact Assessment and Mitigation. This section does not identify specific properties to be displaced.

**Response.** Please refer to Response 47.12 regarding the reason why the DEIR/Technical Appendix does not identify the specific properties that would be displaced.

66.120. The only fair way for citizens, property owners and business people to accurately assess the impacts of this construction is to provide detailed maps that depict which specific properties will be affected. This has not been done and the omission of this material makes the entire discussion incomplete and does not provide fair notice to affected people that their immediate interests are at stake.

**Response.** Please refer to Response 47.12 regarding the reason why the DEIR/Technical Appendix does not identify the specific properties that would be displaced.

66.121. Page 3.2-100(2) [of the DEIR/Technical Appendix]. It is stated that there are no feasible mitigation measures for Alternative VI that could reduce social impacts. We feel that the tunnel option to Alternative VI would reduce much of the social impacts such as visual, traffic, parking and noise. The tunnel option of Alternative VI was not analyzed in this section. There needs to be an assessment of the mitigating factors of a tunnel through San Bruno as opposed to a cut-and-cover method of construction.

**Response.** Current proposals to transpose the BART alignment and Huntington Avenue, moving the BART construction farther from the Fifth Addition, or to implement tunnel construction would somewhat reduce social impacts. The tunneling option would reduce the visual, traffic, parking and noise impacts all along the route of the subway from those created by cut-and-cover construction except at the tunnel portal locations. However, please refer to Response 17.68 for a discussion of the unlikelihood of the tunnel construction option.

66.122. Page 3.2-103, [of the DEIR/Technical Appendix], Table 3.2-9. This table lists the amount of residents and employees displaced by each alternative. How were these figures derived and is there a DEIR report documenting the count? If there is, were properties identified? How can we assess the accuracy of the information presented?

**Response.** The methodology for estimating the number of residents and employees to be displaced is described in the first paragraph on page 3.2-56 of the DEIR/Technical Appendix.

66.123. Page 3.3-88(12) [of the DEIR/Technical Appendix] states that an 8-foot fence (presumably with barbed wire) would not disrupt any view for the Fifth Addition in San Bruno, because no significant view existed. We feel that any view other than an 8 foot high barbed wire chain link fence 60 feet from your residence is a significant view. This impact is totally ignored and obfuscated.

**Response.** Please refer to Response 17.57 for a discussion of visual impacts to the Fifth Addition associated with Alternative VI .

66.124. Page 3.4-30(8) [of the DEIR/Technical Appendix] specifically addresses buildings that are listed as "potentially eligible for the National Register." The City of San Bruno has no historic register. What jurisdiction initiates and designates these buildings to be registered?

**Response.** The National Register is the official list of the nation's cultural resources. It is a list sponsored by the federal government and authorized under the National Historic Preservation Act of 1966. The program is administered by the National Park Service, working under the Secretary of the Interior. Properties listed in the National Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture. These resources contribute to an understanding of the historical and cultural foundations of the Nation. Anyone can nominate a cultural property to the National Register of Historic Places. The Advisory Council on Historical Preservation (federal level) with the assistance from the State Offices of Historic Preservation (state level), is the final arbiter of whether a particular property qualifies for the National Register.

66.125. Page 3.4-34(8) [of the DEIR/Technical Appendix]. The historic Millbrae Train Station needs to be moved 15 feet to the west. This is to be mitigated under Mitigation Measure 6.1 "Memorandum of Agreement," but this section does not explain well what the MOA will do. What physically will occur?

**Response.** Please refer to Response 6.24 for a discussion of the revised plans for to the Millbrae CalTrain Station.

66.126. Page 3.5-30 [of the DEIR/Technical Appendix] states that all Alternatives and especially Alternatives IV and VI would only add a small BART-generated increase in demand for local services (emergency services, etc.). Is there a budgeted estimate that the City can use for additional funds? These impacts need to be quantified so local communities (including the citizens of San Bruno will know what they fac[e] during construction, and after it is completed).

**Response.** There is no estimated budget for an increase in demand for local emergency services, but the experience of BART in the other cities it serves is that calls to emergency service providers increase with the arrival of BART, but not to the point that additional personnel or equipment are required. Moreover, the California Mutual Aid Agreement (CMAA), discussed in Response 14.57, results in BART Police coming to the assistance of local police officers in the performance of their duties, thereby contributing to the overall safety of the surrounding community. Please also refer to Response 16.2 for a discussion of impacts to local police, fire, and emergency services.

66.127. Would tunneling and/or cut-and-cover have any adverse effect on adjacent properties? Could 70-foot deep tunnels along Huntington between Sylvan and Florida Avenue cause soil hazards to the residences fronting this corridor?

**Response.** Several residential and commercial structures located along Huntington Avenue, between Sylvan and Florida Avenues, would front the BART corridor. Even though these properties are located on the opposite side of the street fronting the corridor, their distance to anticipated excavations for cut-and-cover subway sections would be only about 60 feet, and the depth of excavations would range between 50 and 60 feet. Therefore, these properties would likely be within the zone of influence of excavations, where excavation-induced settlements may occur. Mitigation of excavation-induced settlements is discussed on pages 3.13-108 through 3.13-109 of the DEIR/Technical Appendix. Acceptable limits for excavation-induced settlements will be based on site-specific geotechnical studies performed during final design of the project, and on local conditions. Established settlement limits will be enforced during construction.

The residential and commercial properties along Huntington Avenue, between Sylvan and Florida Avenues, would likely be located within the settlement trough of the bored tunnel alignment option under Huntington Avenue, since the depth of the tunnel would be about 70 feet. The width of the settlement trough and the settlement magnitude is a function of the type of soils present in this area, the groundwater level, and the tunnel excavation and support method. Generally, structures or parts of structures located closer to the tunnel alignment would be subjected to higher settlements than those located farther away; however, variable subsurface conditions could result in higher settlements in some locations. Mitigation of tunneling-induced settlements is discussed on pages 3.13-110 through 3.13-112 of the DEIR/Technical Appendix. Acceptable limits for tunneling-induced settlements will also be based on site-specific geotechnical studies performed during design of the project, and on local conditions. Established settlement limits will be enforced during construction.

- 66.128. Page 3.7-31, Figure 3.7-7 [of the DEIR/Technical Appendix], indicates mitigation measures such as 1.1, 6.1, 7.1 and 9.1 which propose to create wetland habitats of equal habitat values. However, the land being acquired for new wetlands only diminishes upland areas that support vegetation and animal habitat. No new land is being acquired. This appears to be like robbing Peter to pay Paul. The full impact of this should be discussed so we know what the biological impact is, and so we can determine if that impact is justifiable in light of the benefits to be derived from the particular alternative.

**Response.** In consultation with USFWS and the SFIA, mitigation measures for impacts to SFGS habitat no longer involve creation of wetland habitats from upland habitats on the west of Bayshore parcel. The mitigation measures currently involve enhancement of existing habitats on the West of Bayshore parcel to increase habitat value for the SFGS and California red-legged frog. An off-site mitigation location has been added to the proposed mitigation program and a potential suitable site identified (Steel Ranch). In addition, BART will create wetland habitat for the SFGS and California red-legged frog at a site immediately adjacent to the west of Bayshore parcel. The reader should refer to Volume I and the Biological Assessment and Biological Opinion in Volume V of this FEIR/FEIS for more details.

- 66.129. Page 3.7-36 [of the DEIR/Technical Appendix]. Mitigation Measure 5.1 proposes the relocation of the San Felipe-South Lomita Canal. What guarantees are there that the relocation process will not destroy the species that are to be protected? What will be done to enhance the protection of the endangered species?

**Response.** Mitigation Measure 5.1 was proposed for those alternatives that include the Airport Intermodal Station (AIS). BART and SamTrans have selected a new LPA that does not include the AIS. Since the draft environmental document was prepared, the USFWS has indicated that they prefer no wetland development on the west of Bayshore parcel. Please refer to Response 4.4 for a discussion of potential mitigation options for impacts to the SFGS.

66.130. Page 3.7-33 [of the DEIR/Technical Appendix]. Mitigation Measure 2.1 proposes avoidance of wetlands by tunneling deeper. Are there studies as to what depth of tunneling is required so that ground borne noise or vibration will not repel and agitate animal species, thereby contaminating their habitat? How do we know that tunneling deeper is the answer to this problem? Are there other mitigation measures that might be employed? What are the relative costs of the competing mitigating measures? The relative benefits?

**Response.** Groundborne noise occurs only inside buildings and consequently would not affect animals in the context presented in this comment. For groundborne noise to occur, it is necessary to have relatively efficient radiators of acoustic energy such as flexible building elements (e.g., walls, floors, ceilings). Soil is not a good radiator of sound. Groundborne vibration from BART trains would be less significant than that associated with soil testing, which USFWS has determined does not create a significant adverse effect. Furthermore, vibration from transit trains is confined to a narrow zone about the trackway, being significantly attenuated in the soil as it propagates away from the subway. Groundborne vibration would be of low enough magnitude and restricted to a narrow zone that it would not significantly affect wildlife.

66.131. Page 3.7-41 [of the DEIR/Technical Appendix]. Mitigation Measure 10.1 proposes to enclose the San Francisco Garter Snakes with fine mesh chain link fencing. Will this work? What research supports this mitigation measure? Don't snakes use underground tunnels made by other animals? How could one contain the snakes?

**Response.** The USFWS has required the use of enclosure fencing in other projects on the west of Bayshore parcel, such as the Millbrae sewer line repair. The USFWS is requiring the fencing for this project as part of Section 7 Consultations. Snakes may be contained in an enclosure or excluded from a given area with the drift fences. Drift fences are short one- to two-foot tall fences of fine wire mesh or plastic sheeting which have bases buried 6-8 inches in the ground. Snakes are unable to crawl through or under the fence. The SFGS does use underground tunnels made by other animals. To make the fencing more effective, all tunnels holes within the area to be protected will be blocked. These areas are expected to be extensively disturbed and altered and it is unlikely a burrowing animal would surface in such an area.

66.132. Page 3.7-66 [of the DEIR/Technical Appendix]. Alternative VI states that construction will only temporarily disturb the wetlands. What is the precise disturbance and what will it do? How much and how long of a disturbance will it take to permanently scar or destroy the habitat? How will these impacts be mitigated? Can they be mitigated? What is the precise disturbance and what will it do?

**Response.** Construction of Alternative VI with the San Bruno tunnel option as identified in the DEIR/Technical Appendix would result in the following disturbances:

- The construction right-of-way for the crossing at South Spruce Avenue affects approximately 0.29 acres of seasonal wetland habitat.
- The construction right-of-way near Cupid Row Canal would affect approximately 0.03 acres of wetlands.
- The 17-acre launching and laydown site on the SFIA property west of Highway 101 would disturb approximately 0.43 acres of shallow seasonal wetlands.
- Construction of temporary tracks would disturb approximately 0.35 acres of drainage ditch and related wetland habitats.

The degree and duration of disturbance required to permanently scar or destroy the habitat is unknown, although implementation of Mitigation Measures 1.1 and 1.2 (on pages 3.13-142 and 3.13-143 of the DEIR/Technical Appendix) would reduce temporary impacts to an insignificant level. Operational impacts would be mitigated to below a level of significance using Mitigation Measure 1.1, Creation of Creekside Habitats, on page 3.7-29 of the DEIR/Technical Appendix.

- 66.133. Page 3.7-67[3] [of the DEIR/Technical Appendix]. Disturbance of 17 acres may permanently scare or destroy species. This should be discussed in more detail, as set forth in the immediately preceding paragraph (i.e., see discussion re Page 3.7.66).

**Response.** The 17-acre disturbance refers to upland habitat that would be used for construction launching and laydown. Within these 17 acres are 0.43 acres of shallow seasonal wetlands. The temporary disturbance of 17 acres during construction is not expected to have a permanent impact on the SFGS. The snakes primarily use wetland habitats and upland habitats that are available in the area and not slated for disturbance. Prior to the start of construction, a monitoring and mitigation plan, approved by the regulatory agencies, will be initiated to ensure the protection of the SFGS and other sensitive species. Please refer to Response 66.166 for further discussion of this issue.

- 66.134. Page 3.7-70 [of the DEIR/Technical Appendix], Table 3.7-2, states that there is no permanent effect to sensitive species. Construction time forecasted in the DEIR, spanning several years, might well produce permanent effects. Continual underground vibration that may affect and drive away species is but one possibility. This needs to be analyzed.

**Response.** Studies have shown that, except for continuous sources of noise that can interfere with communication between birds (songbirds in particular), human noise has very little effect on wild animals unless it is of extremely high levels. Noise impacts to the San Francisco Garter Snake and Red-legged frog due to proposed project construction are expected to be localized. The entire construction zone for the proposed project on the west of Bayshore parcel would affect a small portion (approximately 10 acres) of this 180-acre parcel of land inhabited by these two sensitive species. BART has been in consultation with the USFWS and developed a mitigation program that would minimize and long-term impacts and preserve the species on the site. This mitigation program would include habitat enhancement efforts as well as a captive feeding program. Details of these and other mitigation measures designed to minimize project construction impacts are presented in the Biological Assessment and Biological Opinion, contained in Volume V of this FEIR/FEIS. Please refer to Response 66.130 regarding groundborne (underground) vibration impacts to sensitive species.

- 66.135. Page 3.8-5 [of the DEIR/Technical Appendix], Figure 3.8-3. This table shows a map of San Bruno with areas of 100 and 500 year flood plains. No indication of flooding is shown at the area of the intersection between Huntington Avenue and San Mateo Avenue to Huntington Avenue and Angus Avenue and Angus to San Mateo Avenue at the north end of the central business district as well as the Belle Air neighborhood. This area receives a large percentage of the storm drainage of San Bruno and has been subject to frequent flash floods 2-3 feet high averaging at least one every other year. Reference the San Bruno General Plan, 1984, page 13. This condition needs to be analyzed and addressed in the DEIR.

**Response.** Figure 3.8-3 is intended to show the extent of the 100-year and 500-year flood plains as delineated by the Flood Insurance Rate Maps issued by the Federal Emergency Management Agency (FEMA). On page 3.8-8 of the DEIR/SDEIS note that the Central Business District and other areas of San Bruno have experienced flooding even though they are designated as part of the FEMA flood plain. All significant environmental impacts associated with flooding in the Central

Business District have been analyzed and mitigation proposed. A detailed hydrology study conducted during the preliminary engineering design would be used to determine the requirements for storm drain improvements.

- 66.136. Page 3.8-11 [of the DEIR/Technical Appendix]. Mitigation Measure 1.1 [Elevation of BART Facilities] states that stations will be designed to be one foot above the 100-year flood line. Does this criteria revise the subway downtown station of Alternative V-B, considering its flood potential?

**Response.** The subway downtown station under Alternative V-B would be constructed as a below-ground structure; entrances and other points of potential water entry will be located above the 100-year flood line to protect them from flooding.

- 66.137. Page 3.8-14 [of the DEIR/Technical Appendix]. Mitigation Measure 3.1 [Stormwater Infiltration] will construct drainage swales and/or dry wells. Considering the flood area in the proposed Downtown Station area, where is this drainage facility going to be located?

**Response.** The Downtown San Bruno Station is located in a fully developed urban setting. The change in stormwater runoff between the existing condition and the proposed Downtown San Bruno Station would be negligible. This also is true for the two I-380/San Bruno Station layouts. There would be no discernible difference in stormwater runoff to be mitigated for any of these station layouts.

- 66.138. Page 3.9-7 [of the DEIR/Technical Appendix], Figure 3.9-4. No designation is given in this map as to the projected ground-borne noise through the wetlands area. This should be quantified to evaluate sensitive species living in this habitat.

**Response.** Figure 3.9-4 shows where noise and vibration measurements were taken to define the existing conditions on the site. Such measurements are only useful where a threshold of effect can be determined. Such a threshold has not been determined for the SFGS or other sensitive species in the area and thus ambient noise and vibration measurements are not useful to evaluate the impact of noise and vibration on sensitive species. In addition, as indicated in Response 66.130, groundborne noise is only an indoor phenomenon.

- 66.139. Page 3.9-11 [of the DEIR/Technical Appendix]. Tables 3.9-3, 4 & 5 list criteria for noise levels maximum levels [as] set by BART. Isn't this a bit like the fox guarding the hen house? Are there other agencies with noise level criteria? Why are the levels set at these figures? What is this based on?

**Response.** The noise and vibration criteria were adopted by BART as part of the extensions program system design criteria. The noise criteria, promulgated by the American Public Transit Association, are widely accepted as guidelines for controlling transit noise and are used for transit systems throughout the United States. They are specifically designed to address noise and vibration from transit systems, which is different than other community noise sources. Experience has shown that adherence to these criteria results in no significant impacts to the affected community.

- 66.140. Page 3.9-7, Figure 3.9-4; [and] Page 3.9-9, Figure 3.9.2 [of the DEIR/Technical Appendix]. These maps and tables classify the entire San Bruno corridor as "Area Category V - Industrial Areas or Freeway and Highway Corridor," thus allowing over 60 dBA. These areas should be classified as

"Area Category III - High Density." Areas on Figure 3.9-4, designated as 9, 13, 14, 16, 17 and 18 are well off any industrial, freeway and highway corridor.

**Response.** The ambient noise levels in many of the areas of San Bruno adjacent to the BART alignment alternatives studied are similar to ambient noise levels within highway or freeway corridors (i.e.,  $L_{dn}$  over 65 dBA). Except for the survey location on San Luis (No. 18), the ambient noise levels measured for the other locations cited (9, 13, 14, 16 and 17) equal or exceed 70 dBA  $L_{dn}$ . These high, existing ambient noise levels are due to CalTrain, the airport, local traffic and in some instances Highway 101. The noise criteria for Category V are consistent with this high ambient noise. The commentor misunderstands the meaning of the noise levels indicated in Table 3.9-1 on page 3.9-3 of the DEIR/Technical Appendix. They are merely a statement of the ambient noise levels that typically exist in each of these categories. They are not allowable noise levels per se. They are used to determine consistent threshold levels of train noise depending on the existing ambient noise environment. The threshold noise levels for determining transit train noise impact are indicated in Table 3.9-3. Please also refer to Response 72.249b.

- 66.141. Page 3.9-81 [of the DEIR/Technical Appendix]. Mitigation Measure 7.1 states that vibration levels will be reduced to BART criterion levels. What about FTA, County and City ground borne noise level criteria? Are there other criteria that may govern? That regardless of the governing nature of the criterion, should be advisable to consider?

**Response.** The FTA, San Mateo County and the City of San Bruno have no published criteria that address groundborne noise and vibration. The groundborne noise and vibration criteria used by BART and other transit systems in the United States have been found to reduce noise and vibration to acceptable levels in affected communities and are appropriate for assessing transit system impacts. In addition, please refer to Response 66.139 for a discussion of the APTA criteria.

- 66.142. Page 3.9-81 [of the DEIR/Technical Appendix]. Mitigation Measure 7.2 refers to isolating a building at the foundation. What is entailed? Is the building lifted off its foundation? Are the occupants required to vacate while this work is done? Is there any noise associated with it? If there does have to be dislocation, how long will the inhabitants of the building be displaced and where will they live and work during this time?

**Response.** As addressed in Response 66.10, building isolation for groundborne noise and vibration mitigation would be considered only for lightweight structures such as residential buildings. No businesses would be included in the group requiring mitigation.

- 66.143. Page 3.9-68 and 69 [of the DEIR/Technical Appendix]. Mitigation Measures 7.1 and 8.1 refer to types of sound walls. Soundwalls help deaden sound immediately adjacent to the wall, but many times reflect and/or amplify sound farther out. Are there studies showing the effectiveness of this mitigation?

**Response.** Sound walls, especially those contemplated for mitigation of BART train noise, are very effective at reducing noise. Although there has been much press concerning the reflection of sound or amplification of sound farther out in connection with sound walls built by Caltrans along freeways, extensive studies have demonstrated these effects to be very minor or nonexistent.

- 66.144. Page 3.9-83 [of the DEIR/Technical Appendix], Mitigation Measure 11.3 [Relocation]. What is the "crossover" that is being relocated? What is a crossover?

**Response.** Mitigation Measure 11.3 refers to a “crossover,” which allows a train to cross from one track to another. Noise and vibrations are generated when a train passes over a crossover. Mitigation Measure 11.3 refers to a crossover south of Hillcrest Boulevard, and north of Garden Lane as shown on page 83 of the Design Appendix.

- 66.145. [Chapter 3.10 of both the DEIR/Technical Appendix and the DEIR/SDEIS] indicates that BART will reduce overall air pollutants. Wouldn't the area around a new 3200-car parking garage and end-of-the-line commuter BART station cause an increase in the immediate area? This needs to be addressed. Also, won't there be increased air pollution in the congested parking areas of the various stations? How will this affect the quality of life in the immediately surrounding area?

**Response.** The BART project would result in an increase in vehicular traffic in the vicinity of the proposed Millbrae Avenue Station. An increase in traffic would result in an increase in vehicular emissions, which in turn would cause a decrease in local air quality. This effect on local air quality in the vicinity of the proposed Millbrae Avenue Station is addressed in the DEIR/Technical Appendix, Chapter 3, Section 10.

Two intersections in the immediate vicinity of the Millbrae Avenue BART Station were included in the local carbon monoxide (CO) impact analysis: El Camino Real/Millbrae Avenue and Millbrae Avenue/Rollins Road. These intersections were selected because they were among the intersections identified as most likely to be adversely affected by the project. They are therefore the locations of the expected worst-case local air quality impacts in the vicinity of the Millbrae Avenue Station. Additionally, two proposed parking structures at the Millbrae Avenue Station were included in the analysis.

The analysis of local CO impacts is conservative; the analysis combines peak-hour traffic volumes, worst-case meteorological conditions, and worst-case receptor locations, and compares the results (predicted CO concentrations) to federal and state ambient air quality standards that are established at conservative, health-based levels. Predicted worst-case CO concentrations in the vicinity of these intersections and parking structures do not exceed federal or California ambient air quality standards under any BART design alternative in any year the project would be in service (1998 and beyond). Therefore, although the project would result in some finite decrease in local air quality in the vicinity of the Millbrae Station, the resulting local CO concentrations would not have a deleterious effect on the “quality of life” of the nearby residential areas. Please also refer to Responses 16.80 and 79.5 for an additional discussion of the local CO analysis.

- 66.146. Shouldn't there be any mention [in Chapter 3.11 of both the DEIR/Technical Appendix and the DEIR/SDEIS] of the possibility of the risk of getting onto the BART tracks and being exposed to the electric rail or being run over by trains on the track at the station locations. Fencing methods and signage locations should be a part of this chapter.

**Response.** Criteria for fencing, traffic barriers, and signs within the BART system right-of-way are specified in the BART Extensions Program Design Criteria, Volume I. All BART right-of-way adjoining private property will be protected at the property line with a fence, a wall, or combination of a fence and wall. Fencing of at-grade and retained cut portions of the alignment, including transitions to subway or aerial sections, will be the principal means of protecting pedestrians, vehicles, and animals from the hazards of high speed trains and the electric third rail. Fencing will be installed on top of retaining walls along the right-of-way line. Where aerial portions of the alignment abut private property that is not fenced, fencing will be installed. As an additional precaution, where the alignment abuts either playgrounds or schoolyards, the surface under the fence will be paved to inhibit any undermining of the chain link fabric.

Fences along the right-of-way will be marked at regular intervals with warning signs to protect persons from electric third rail hazards. Signs along the right-of-way will bear the words "DANGER", "ELECTRIC THIRD RAIL", and "KEEP AWAY", as well as the Spanish words "PELIGRO" and "NO PASE". At station locations, warning signs bearing the words "DANGER", "ELECTRIC THIRD RAIL", and "DO NOT ENTER" will be located on third rail coverboards and at the end of station platforms.

- 66.147. We are aware that the local San Bruno schools have voiced a number of detailed concerns; these need to be addressed in the DEIR in order that local residents can fully assess the potential dangers to their schoolchildren, as well as assessing the isolation of certain communities as the result of being cut off by the BART alignment, which will be much larger than the current CalTrain alignment. This needs to be discussed.

**Response.** Please refer to Responses 21.5 and 22.15 regarding this issue.

- 66.148. Does BART have any emergency power planned for in case of a PG&E outage? Also, what will the impact be, if any, of all of these construction on local utility lines? Will any of them have to be relocated? If so, who pays for that? Is there a danger of a loss of power in the interim?

**Response.** The BART traction power system is designed to provide normal train service in the event of an outage of a PG&E feeder line. Under such circumstances, auxiliary power distribution for lighting, ventilation, air conditioning, drainage, elevators, escalators, communication, train control, and fare collection would be provided by PG&E. Train control and equipment essential to safety and operations would be supplied from inverters of the uninterruptible power supply system with battery back-up. Emergency lighting for egress would be provided by battery operated lights. In addition, BART maintains three portable generators that could be transported and connected to certain accessible facilities during extended utility outages.

Some existing utility lines would have to be relocated to accommodate proposed BART construction. As noted in Responses 17.85 and 17.87, the costs associated with utility relocation and replacement due to the construction of BART facilities would be funded as part of project costs. The local jurisdiction would bear the costs for new facilities not related to BART or improvements to existing facilities. The division of responsibilities would be specified in agreements with local utility companies to arrange for the design and construction of such relocations.

As noted in Section 3.13.8, Construction/Utilities, of the DEIR/Technical Appendix, construction activities under the BART build alternatives may result in short-term service disruptions during relocation of utilities south of Tanforan Station. The utility companies would schedule any necessary outages at times of low demand to minimize impacts.

- 66.149. Page 3.13-8 [of the DEIR/Technical Appendix] lists possible construction laydown areas. The San Bruno Lumberyard site is not mentioned, yet Page 77 of the Design Appendix shows the Lumberyard being a part of the laydown area. What happens to the business and how is this mitigated? Can it be mitigated?

**Response.** The Design Appendix drawing on page 77 showing the San Bruno Lumberyard site as a possible contractor laydown area is an error. The temporary construction easement lines are revised to be the same as Alternative V on page 47 of the Design Appendix.

66.150. Page 3.13-10 [of the DEIR/Technical Appendix], Table 3.13-2. This table does not list Forest Lane. The Design Appendix indicates this street is to be crossed, demolished and reconstructed. What are the impacts if that occurs?

**Response.** Page 77 of the Design Appendix incorrectly notes that Forest Lane would be reconstructed. Table 3.13-2 of the DEIR/Technical Appendix lists Herman Street for reconstruction, which is correct.

66.151. Page 3.13-10 [of the DEIR/Technical Appendix]. Table 3.13-2 shows San Bruno Avenue having lane restrictions for one month, but in Pages 3.13-9 and 3.13-11 it describes that half of the roadway will be closed while the other half is decked, each side taking a month. Based upon this information, Table 3.13-2 should indicate 2 months of lane restrictions. Also, this table indicates that there would be no lane restrictions on San Mateo and Angus Avenue[s]. How can this be? Page 3.139 mentions detouring the entire construction time of from 9 to 12 months. This sounds like a lane restriction. Forest Lane would also be restricted and detoured. There is an inadequate discussion of these impacts on the local community, including traffic congestion; inability to find parking; inconvenience; loss of business revenue and the corresponding impact on the City's tax revenues, and the potential loss of businesses and jobs.

**Response.** Table 3.13-2 of the DEIR/Technical Appendix is revised to indicate two months of lane restrictions on San Bruno Avenue. Table 3.13-2 is revised to be consistent with the discussion of Impact 7 on page 3.13-47 of the DEIR/Technical Appendix. These road closures are only temporary and short-term and the impact is mitigated. Therefore, loss of business and jobs would be reduced to insignificant impact. However, any business losses and loss of jobs would be addressed in accordance with state and federal laws.

66.152. Page 3.13-11 [of the DEIR/Technical Appendix], Utility Relocation. A large part of San Bruno's sewer line and storm drainage facilities cross the BART right-of-way at or near the intersection of Huntington and San Mateo Avenue. Is there any anticipated "down time" to these City services? There would appear to be a potential impact on both residents and commercial tenants, yet this is not discussed.

**Response.** All utility services will remain in service except for short-term interruptions for service connections. These impacts are discussed in Section 13.8, Construction/Utilities, beginning on page 3.13-101 of the DEIR/Technical Appendix.

66.153. This section [Section 13.2, Construction Scenario of both the DEIR/Technical Appendix and the DEIR/SDEIS] also mentions that at least half of the street would be closed. This would be Huntington Avenue -- in this case right in front of Artichoke Joe's. Would this road closure time be in addition to the 20-30 month duration in Table 3.13-2? There is a potentially devastating impact on Artichoke Joe's, which is a substantial generator of tax revenues, not to mention being the employer of 400 people.

**Response.** The discussion in the last paragraph on page 3.13-9 of the Summary DEIR/SDEIS states that the streets crossing Huntington Avenue would be closed one-half at a time to install decking. Only the east parking lane would be closed for 20 to 30 months, as indicated on Table 3.13-2.

66.154. Page 3.13-13 [of the DEIR/Technical Appendix] refers to a CalTrain shoofly or temporary track relocation. Where would it be and for how long? How will it affect First Avenue in San Bruno and the residents on this street?

**Response.** The CalTrain shoofly has been added to the Design Appendix drawings. Construction of a shoofly would involve taking the existing southbound CalTrain track out of service from the vicinity of the I-380 overpass to approximately Cupid Row by installing track crossovers at each end to allow train operations in both directions over the existing northbound track. The crossovers would be power-operated and tied into the automatic block signal system. The northbound track would not be shifted and therefore would not impact either 1st Avenue or the residents in the Belle Air neighborhood.

- 66.155. Page 3.13-47([Impact] 7). San Bruno Avenue will have limited access and delays. The street is already over-utilized and parking is scarce. It does not appear that the proposed mitigation measures of lane closures and detours will reduce impacts to insignificant levels. What is the support for the statements in the EIR in this regard?

**Response.** Please refer to Response 17.69 for a discussion of provision of parking along Huntington Avenue during construction to mitigate impacts to businesses. Please refer to Response 47.15 for a discussion of access across San Bruno Avenue during construction of the BART Extension.

- 66.156. Page 3.13-51([Mitigation Measure] 17.2) states that some work will be done at night. The impact of attendant noise and dust on adjacent areas, during the time people are home from work, with their families, is not discussed. This issue should be addressed.

**Response.** The night work referred to in the comment pertains to installation and tie-in of shooflies that will minimize the effects of project construction on CalTrain operations. The DEIR/Technical Appendix indicates that construction activities may cause temporary, localized exceedances of federal or state air quality standards for PM<sub>10</sub>. This conclusion also applies to dust generated by work on the shooflies. Since installation of the shooflies is only a small portion of overall project construction, most of which will take place in the daytime, exceedances of PM<sub>10</sub> standards are less likely at night. Also PM<sub>10</sub> concentrations in indoor air would typically be much lower than those in outdoor air due to the air exchange restrictions imposed by the building structure. Please also refer to Response 19.134 for a discussion of the measures that will be implemented to minimize the amount of particulate matter generated during construction.

- 66.157. Page 3.13-52 [of the DEIR/Technical Appendix]. Isn't it a fact that the tunnel option would not disrupt traffic on the streets above? Why isn't this discussed as a potential mitigation measure? Why shouldn't BART pay for this mitigation measure? Why should all of these impacts be visited upon San Bruno, and then San Bruno asked to pay for the mitigation? (The EIR specifically mentions that any tunneling over and above what is in the original locally preferred alternative will be paid for by the local communities. Why is this so? Why doesn't BART pay for the mitigation of the impacts it causes?)

**Response.** The bored tunnel construction through the City of San Bruno under Alternative VI was discussed as a construction option and is not a mitigation to cut-and-cover subway construction impacts. Construction options are fully analyzed in order to find the most appropriate design for a project, and impacts from such options are mitigated whenever feasible. Mitigation measures, in contrast, serve to reduce the impact of designs and alignments. It would be infeasible to use permanent design changes, such as tunneling, to mitigate short-term construction impacts that are mitigable through other means.

Tunneling beneath streets does cause disruptions at the ground level and has created serious impacts as happened recently in the construction of the Los Angeles subway when sinkholes formed. The

construction-related impacts of constructing a cut-and-cover subway through San Bruno have mitigation measures that would reduce their impacts to an insignificant level. The traffic management plan as part of the construction plan will reduce adverse traffic impacts under the cut and cover construction method in the City of San Bruno to less than significant. Please refer to Response 17.69 for a discussion of provision of temporary parking along Huntington Avenue during construction. Please refer to Response 17.74 for a discussion of traffic impacts along Huntington Avenue in the vicinity of Angus Avenue during construction. Please also refer to Response 47.17 for a discussion of the level of detail available in conceptual cost estimates.

- 66.158. Page 3.13-65 [of the DEIR/Technical Appendix]. This lists unavoidable significant impacts to neighborhoods and businesses regarding traffic, parking, noise, dust and visual quality. Does BART provide for any financial recourse to a homeowner who can't sell a property during the two-and-one-half years of construction? Or to a business that can't survive a reduced customer base? The impact on local businesses is nowhere addressed in any detail.

**Response.** BART/SamTrans would address demonstrable loss of income to businesses in accordance with state and federal laws as applicable. Unless a property is displaced in part or in whole as part of the project, BART/SamTrans is not authorized to provide compensation. The impact on local business during construction is fully addressed in Section 3.13 Construction of the DEIR/Technical Appendix. In addition, please refer to Response 17.69 which discusses a staged construction plan on Huntington Avenue north of the San Bruno CalTrain Station under Alternative VI and the Aerial Design Option LPA.

- 66.159. What happens to San Bruno Lumber during the construction period when BART uses their property for a construction yard?

**Response.** As indicated in Response 66.149, BART proposes to use the stretch of vacant land adjacent to the alignment as a laydown area during construction, not the San Bruno Lumber Yard.

- 66.160. Page 3.13-82 [Impact](4) [and] (6) claim that no mitigation measure can reduce impacts of construction. Would a temporary painted wood fence with potted large gallon trees aligning the fence help reduce the visual impact? Or, with the extra dirt obtained through excavation, create a landscaped berm 15 to 20 feet high? This would also help mitigate noise impacts.

**Response.** Please refer to Response 41.30 regarding visual screens to minimize construction-period visual impacts.

- 66.161. Page 3.13-102 [of the DEIR/Technical Appendix] refers to utility disruption and temporary backup systems. Is it possible to construct a temporary gas, electric, water, sewer and storm drainage bypass system before services are cut off? Who pays to mitigate this problem?

**Response.** Where bypass systems are required to maintain continuous utility service, BART contractors or the utility companies will construct replacement lines prior to service interruption. As described on page 3.13-102 of the DEIR/Technical Appendix, the interruption may take as long as one or two hours while the replacement line is being "tied in" to the older segment of line remaining in place. The cost of all utility additions and modifications made necessary by the BART extension will be negotiated between BART and the utility provider.

BART maintains continuous service of utilities it affects during construction, or if it is not possible to maintain continuous service BART does its best to minimize inconvenience.

66.162. A large portion of San Bruno's sewer and storm drainage system runs across the BART right-of-way at Huntington and San Mateo Avenues. This could be very significant if flash floods occurred at this time. This is a flood area, and this potential impact should be discussed, as it will be a major problem if it occurs.

**Response.** Please refer to Response 72.245 for a discussion of this topic.

66.163. Pages 3.13-107 through 3.13-112. This portion of the DEIR[Technical Appendix] refers to ground water control, dewatering and ground settlement. Even though many methods are used to bring any impacts to adjacent streets, sidewalks and buildings to an insignificant level, we contend that underground conditions vary and are not consistent from one area to another and can be very unpredictable. We are concerned that dewatering, excavations and ground vibrations due to construction may cause residential units and commercial units along Huntington Avenue to encounter foundation settlement and cause structural and cosmetic damage. Artichoke Joe's has deep footings and a basement adjacent to the BART right-of-way and may be impacted as well as homes on Huntington Avenue between Sylvan and Florida Avenue where BART will be 70 feet deep at subway conditions.

**Response.** Please refer to Response 66.127 for a discussion of mitigation of settlement of structures located adjacent to the BART alignment along Huntington Avenue.

66.164. Page 3.13-118([Impact]3). Monitoring ground settlements during construction can be useful. However long term effects may not occur for a few seasons of ground water and temperature variations. This should be analyzed.

**Response.** Long-term effects may not occur for a few seasons of groundwater and temperature variations. Depending on the construction practices and dewatering methods used, the groundwater table adjacent to excavations may be altered temporarily or on a long-term basis. If the existing subsurface soils are the type that can consolidate with time (i.e., Bay Mud), then ongoing settlement due to consolidation can occur as a result of altering the groundwater table. Based on information obtained from site-specific geotechnical studies performed during final project design, potential long-term excavation-induced settlements and will be calculated and an appropriate long-term monitoring program, where necessary, will be implemented. This mitigation measure, 4.1, i.e., groundwater control during tunneling, is discussed on page 3.13-110 of the DEIR/Technical Appendix.

66.165. Page 3.13-125 [of the DEIR/Technical Appendix] states that there may be a loss of life of an unknown number of endangered species in the San Francisco International Airport wetland area. Then Mitigation Measure 5.2 on Page 3.13-127 details a restoration plan. At what point during the destruction of the species and their habitat will the species and the habitat become incapable of being restored?

**Response.** The SFGS is an endangered species and, as such, is in danger of extinction. The loss of this particular population of SFGS would bring it even closer to extinction. However, there does not appear to be any connection between this population of SFGS and other remaining populations. Other populations are not likely to be dependent upon this particular gene pool for continued existence. Regarding the issue of habitat restoration, it is important to note that the existing habitats on this site were created by human alterations and in many instances are maintained by human management.

66.166. Page 3.13-142 [of the DEIR/Technical Appendix] and Page 79 of the Design Appendix indicates that 17 acres of land is designated for a construction laydown area. We believe this destruction is

irreversible to endangered species. Also construction noise, vibration and trampling may run off or completely destroy the species. They will be forced into areas in the surrounding neighborhoods that may not be suitable. Have the appropriate environmental groups and agencies been notified of these potential impacts so we can have the benefit of their expertise in this area? If not, why not?

**Response.** All physical impacts have been identified and it has been concluded that these impacts are not irreversible. Impacts to species have been assessed in consultation with USFWS and under Section 7 of the Endangered Species Act and are presented in the Biological Assessment of Volume V. The Biological Opinion of the USFWS indicates that proposed mitigation measures to enhance habitats elsewhere on the west of Bayshore parcel would preserve a viable population of SFGS at this site. BART has been in close contact and consultation with the various state, federal, and local agencies regarding the impacts of the proposed project. These agencies are providing input that will be used to select an appropriate and suitable project and construction program.

- 66.167. Proper precautions for below-ground stations in this area should be dealt with.

**Response.** All underground stations located in areas of potential flooding will be designed with entrances and other points of potential water entry located above the 100-year flood line to protect them from flooding.

- 66.168. Page 3.13-160 [of the DEIR/Technical Appendix,] (1) and (2) indicates noise and vibration policies along the BART corridor. We believe the noise level of BART will negatively affect the comfort level of customers at the San Bruno business of Artichoke Joe's at 659 Huntington Avenue. We also believe that groundborne noise (or vibration) will negatively affect sensitive equipment at Artichoke Joe's such as computers, HVAC equipment sensors, electrical generator and V.P.S. systems, sensitive camera and surveillance systems and sensitive food service ordering remote control systems.

**Response.** There are no indications that BART operational noise would affect any of the businesses in San Bruno including Artichoke Joe's. The groundborne noise from BART would be barely noticeable if at all above the ambient interior noise inside Artichoke Joe's. Artichoke Joe's appears to be operating with no difficulty with existing groundborne vibration from CalTrain, local street traffic (buses, cars) and self-generated vibration (mechanical equipment, people walking within the building). Vibration from BART would be similar or less than that produced by these other sources, and consequently would have no negative effect on customers or equipment at Artichoke Joe's. Please also refer to Responses 66.8 and 66.98.

- 66.169. Page 3.13-194([Impact]12) states that a hydraulic pile driver would reduce the noise impact to an insignificant level. This does not appear credible. Anyone who has ever heard a hydraulic pile driver knows the massive sound, vibration, and noise that such a mechanical device generates. What is the decibel rating of the contemplated pile driving machine? What is the real level of sound that is likely to be generated?

**Response.** There is a misconception regarding what a static-load hydraulic pile driver is. A static-load hydraulic pile driver uses no impact or vibratory forces, but instead forces in piles using the weight and resistance of adjacent piles for leverage; it can be used only in certain situations. Typical noise levels for static-load hydraulic pile drivers are less than 70 dBA at 25 feet. Pre-drilled piles are another alternative where static-load hydraulic pile driving can not be used.

- 66.170. Page 3.13-195 [of the DEIR/Technical Appendix] refers to Mitigation Measure 2.3 to shield pile driver noise. What decibel level does this drop the pile driver to?

**Response.** BART construction specifications limit pile driving noise to 85 dBA at 50 feet. Typically, this noise level can be met by predrilling holes ahead of the piles, driving piles at low impact, and seating the pile with hard driving. Usually, hard driving occurs when the pile head is below the excavation line, which shields the noise to specification level. The noise reduction achievable from a properly designed and constructed pile driver shield is approximately 20 dBA.

The typical amount of noise treatment practicable, which can be directly applied to the conventional, diesel or steam driven, impact pile driver would result in a reduction of 10 to 15 dBA. Specially designed and constructed, quieter impact pile drivers do exist, but may not be available to the contractor. However, these special pile drivers can produce as much as 20 dBA lower noise levels compared with a conventional impact driver that is unshielded and unmuffled.

- 66.171. Page 4-17 [of the DEIR/Technical Appendix], Land Use, states that up to 5,255 residents will be displaced under this Alternative VI. We believe this number is in error. Due to the magnitude of the statement, it should be double-checked. If, on the other hand the number is correct, how will this massive impact be mitigated? Why should this project be built if over 5,000 people will be dislocated? Why do that when we can simply upgrade the CalTrain line under the TSM alternative, save money, have a faster route to the airport, and avoid this problem?

**Response.** The number of displaced residents under Alternative VI cited on page 4-17 of the DEIR/Technical Appendix, is incorrect. As noted elsewhere in the DEIR/SDEIS (see Table 3.2-9, page 3.2-103, for example), the correct estimate of residential displacement is about 525. Accordingly, the first bullet under "Land Use" on page 4-17 of the DEIR/Technical Appendix is revised as follows:

- Acquisition of land for BART facilities and subsequent displacement of up to 525 residents and 60 employees....

- 66.172. Page 4-19 [of the DEIR/Technical Appendix] states that the tunnel option of Alternative VI has similar effects to Alternative VI. This does not appear to be correct. It would appear that a bored tunnel through San Bruno will reduce the following significant impacts to Alternative VI: Construction/Transportation - Wouldn't the bored tunnel option allow traffic, parking, bicycles and pedestrians to be left undisturbed? Dump trucks can be directed through the San Francisco International Airport wetland area to the 101 freeway and avoid disruption of sensitive residential and business areas in San Bruno. Construction/Land Use - Fifth Avenue, Belle Air, Lomita Park and San Bruno Park residents along with the central business center would have less impact regarding visual quality, noise, dust and vibration. Construction/Community Services - With no traffic detours or road closures, police, fire and emergency service will not be significantly delayed.

**Response.** Please refer to Response 66.115 for a discussion of long-term and short-term impacts of a cut-and-cover vs. a bored tunnel option. Also please see Response 17.68 regarding the infeasibility of the bored tunnel option.

- 66.173. Page 6-2 [of the DEIR/Technical Appendix]. What does "mid-point of construction (1996)" mean in Table 6-1? Does this represent half the costs? The cost in 1996 dollars, reduced to present value? What does it mean about the actual cost of this project?

**Response.** Please refer to Response 66.109 for a discussion of the meaning of "mid-point of construction."

66.174. Page 6-2 [of the DEIR/Technical Appendix]. What is the cost of the tunnel option to Alternative VI?

**Response.** Please refer to Response 17.66 for a discussion of the tunnel construction option in San Bruno.

66.175. Page 6.2 [of the DEIR/Technical Appendix]. Alternative V-A has both an aerial option to San Francisco International Airport and an underground option. Which one of these is listed in the table? What is the cost of the other option?

**Response.** The cost of the aerial option is shown in the DEIR/Technical Appendix. Please also refer to Response 13.2 for a discussion of the level of detail provided in DEIR/Technical Appendix cost estimates.

66.176. Page 6-10 [of the DEIR/Technical Appendix]. Contributions by local cities: is this inferring that San Bruno is to contribute part of \$130 million? If so, how much?

**Response.** Please refer to Response 19.21 for a discussion of San Bruno's role in funding the project.

66.177. Page 6-15 [of the DEIR/Technical Appendix]. This section indicates daily BART entrances and exits by stations. Page 6-16, Table 6-9, lists entrances, exits and boardings. We contend that Alternative VI would not carry a greater number of riders than Alternative V-B. In fact Alternative V-B would carry more riders than Alternative VI because it would encourage more CalTrain users, with only one transfer required to go to the Airport, versus two transfers being required by Alternative VI. Also a motorist coming from San Mateo County will go to the end-of-the-line station so as to park and then take BART to their destination. We would like to see how these numbers are logically justified. This rationale also applies to the number of daily boardings.

**Response.** Patronage for each BART build alternative was estimated by the mode choice component of MTC's travel demand model, the regionally approved model that is required by FTA. Design Option V-B is the one phased alternative examined among the BART build alternatives, i.e., the end-of-the-line station is farther north than originally planned, the connection to the SFIA is the longest distance and the design is oriented toward continued extension at a future date as a separate project. Alternative VI is extended farther south with two more stations than Design Option V-B and thus has greater geographical coverage in San Mateo County, i.e., more potential riders have quicker access to the station. Please refer to Response 66.111 for a comparison of the number of BART trips to the SFIA under each of the BART build alternatives.

66.178. Page 6-15 [of the DEIR/Technical Appendix] and Table 6-9 state that travel time of Alternative VI from downtown San Francisco to the United Airline counter takes 35.75 minutes and that Alternative V-B takes 43 minutes. We believe this is an error. The only difference in time should be the speed difference from BART and the ALRS. Assuming BART at 60 mph and ALRS at 30 mph, the one-and-one half mile difference between San Bruno Downtown Station and San Francisco International Airport would be one-and-one-half minutes. Upon reviewing Table B-36A, which indicates travel time breakdowns for Alternative V-B, a few questions arise. First, on the southbound matrix looking at Montgomery Street/BART- travel time: Kaiser Medical is the first stop or destination. Shouldn't this be the Hickey station? Next is Tanforan. If there is a downtown intermodal station then there is no Tanforan station. Additionally, why does it take two minutes to go from Kaiser to Tanforan (about 2 1/2 miles) and 9 minutes to go 1/2 mile from Tanforan to City Hall? (What station is City Hall?). What is Hillsdale Shopping Center doing in there? How was the BART transit time calculated? Please explain and/or revise.

**Response.** Table 6-6, Transportation Effectiveness, in the FRDEIR/S#2DEIS contains travel time information from Montgomery and Market Streets to SFIA Terminals that indicates the time under Alternative VI would be 42 minutes compared to the revised time under Design Option V-B of 41 minutes. Typographical errors were found in Tables 3.1-63, Alternative VI Transit Travel Times, and B-36-A, Alternative V-B Transit Travel Times, of the DEIR/Technical Appendix. The revised tables are included on the following pages.

The travel time tables referred to by the commentor, such as Table B-36A in Appendix B of the DEIR/Technical Appendix, include destinations that are real destinations where people want to go, and origins that assume one is at a "screenline" where alternative transit options (including BART) are available. The reference to Tanforan (a destination) is the Tanforan Park Shopping Center and not the Tanforan BART Station.

The travel times include access time from a BART station or other transit vehicle to the final destination depending on which transit mode would be best for use in the travel route. The travel time between the Hickey and the I-380 San Bruno Station under Design Option V-B, in the Tanforan example, would be approximately 3 minutes and 14 seconds. The access time to the Tanforan Park Shopping Center is shorter than to the Kaiser Hospital from their respective BART stations. Similarly, the access time to the Tanforan Park Shopping Center is shorter than to the San Bruno City Hall from the San Bruno BART station.

These travel time calculations were performed by establishing common transit origins and general sampling of common travel destinations. The origins, or starting points, were actually a screenline including various transit options. For example, the Montgomery Street origin included both the Montgomery BART Station and the Transbay Terminal and certain SamTrans downtown express routes. The access time to travel to these transit screenlines was not included because it depends on where the traveler's home or office is, and this varies considerably among people. If you know how long it takes you to get from your home or office to the Montgomery BART/Transbay Terminal area, then you can add this to the time shown in the report to get total travel time. Various transit options were compared in covering the route from origin to destination, and the fastest transit option is shown in the report, whether it be BART, CalTrain or bus. At the end point of any one transit ride, the wait time for another transit provider was included where applicable, as was the walk time to the final destination.

- 66.179. Incidentally, we found no table comparable to Table B-36A regarding transit time for Alternative VI. Why not?

**Response.** Table 3.1-63, Alternative VI Transit Travel Times, is on page 3.1-81 of the DEIR/Technical Appendix.

- 66.180. Page 6-18 [of the DEIR/Technical Appendix]. Alternative VI would not get the most air passengers. It is not the most convenient, especially for CalTrain transfers requiring two transfers as opposed to one with Alternative V-B. Is there a time travel table with CalTrain similar to Table B-36A? A CalTrain user would have a much longer wait for BART to cross the freeway for Alternative VI at Millbrae than would a CalTrain user transferring to the much higher frequency turnaround system of the ALRS.

**Response.** Please refer to Response 66.111 for a comparison of the number of BART trips to the SFIA by BART build alternative. The Transit Travel Time Tables presented for each alternative indicate origin and destination pairs. More than one transit system may be used to travel from one point to another, e.g., the Hillsdale origin requires travel on CalTrain and the travel time shown does not necessarily include a BART ride (although most do) because the fastest

**Table 3.1-63**  
**Alternative VI - Millbrae Avenue to Airport International Terminal**  
**Transit Travel Times (Minutes)(1)**  
**A.M. Peak Period (2010)**

Northbound		Destinations				
Origins		S.F. State	S.F. Civic Center	Union Square	Maritime Plaza	Oakland Center
Hillsdale	Travel Time	49	54	52	55	69
CalTrain	Change From No-Build	-25	-5	2	2	0
Airport Intermodal Station Site	Travel Time	32	37	37	41	52
	Change From No-Build	-15	-8	-2	-1	-5
SFIA Terminals	Travel Time	37	42	43	46	57
	Change From No-Build	-14	-1	-5	-6	-6
So. San Francisco	Travel Time	43	46	37	40	55
CalTrain	Change From No-Build	-12	0	0	0	0
Hickey	Travel Time	24	29	30	32	46
BART	Change From No-Build	-6	-19	-8	-8	-8
Southbound		Destinations				
Origins		Kaiser Medical	Tanforan Shopping	San Bruno City Hall	Hillsdale Shopping	SFIA Terminals
12th Street	Travel Time	41	47	58	86	57
BART (Oakland)	Change From No-Build	-24	-27	-15	0	-4
Montgomery St.	Travel Time	32	34	43	71	42
BART	Change From No-Build	-18	-25	-15	-2	-2
Civic Center	Travel Time	28	30	39	67	37
BART	Change From No-Build	-18	-25	-15	-4	0
Daly City	Travel Time	13	15	24	52	23
BART	Change From No-Build	-11	-18	-9	-19	-27
						UAL (SFIA)

Source: Parsons Brinckerhoff, January 1994

- (1) Travel times include walk or transit access time to final destination. It does not include origin station access time which varies depending on location of travellers residence. Travel times assume utilization of the fastest transit mode (i.e., bus, BART, or CalTrain). Times shown are unweighted.

transit mode is being shown. The waiting times would be similar during peak commute hours for CalTrain riders transferring to either the ALRS or BART because both would be high frequency services (headways of 4 1/2 minutes or less). Alternative VI results in more air passengers because of better connections from the north to SFIA with a station at the International Terminal.

- 66.181. Page 7-11 [of the DEIR/Technical Appendix], Table 7-3 This "Summary of Significant Unmitigable Impacts on Neighborhoods" can be mitigated by a bored tunnel through San Bruno.

**Response.** Please see Responses 17.68 and 66.157 for a discussion of a bored tunnel in San Bruno.

- 66.182. The DEIR should make mention of the possibility of a CalTrain grade separation at the same time as the BART project at San Bruno Avenue and Angus Avenue, thus consolidating time, energy and financial resources. This would impact the area only once instead of BART construction impacting the area in San Bruno for two-and-one-half years, only to have a CalTrain grade separation program impacting San Bruno shortly after the completion of the BART project.

**Response.** Please see Response 66.33 for issues regarding timing of CalTrain and BART development.

- 66.183. There would be a great difference in walking distance to the central terminal for those arriving at internal BART stations as opposed to those arriving via ALRS. This difference does not appear to have been analyzed in the Report, yet it appears to be a significant factor in evaluating, on a comparative basis, the various Alternatives.

**Response.** Walking distance was considered in the estimation of transit patronage to the SFIA and is described on pages 20 and 27 of the Transportation Technical Report. For example, 75 percent of air passengers would walk to their airport destination under Alternative VI and 90 percent of employees working in the terminal area would walk from BART's International Terminal. Of SFIA employees that would take transit to the airport, 40 percent would work in the terminal area and 60 percent would work in remote areas. The difference in walking distance to the central terminal, i.e. the walking distance to transfer from BART to the ALRS at internal BART stations, is offset since the same transfer from BART to the ALRS would be required at external BART stations.

- 66.184. Most of the traffic problems are destined to occur with or without BART. Focus should be on adequate mitigation for localized impacts near the stations.

**Response.** The focus of the intersection traffic impact assessment was intersections in the vicinity of the station. However, other intersections, such as ones between freeway interchanges and the nearest BART station, were also included.

- 66.185. The document does not specifically detail information either about design or land use of individual stations at Tanforan or in Downtown San Bruno or specific design information on the ALRS (a light rail system) on the vacant San Francisco International Airport wetlands just east of the southeast limits of the City of San Bruno. Will an environmental analysis be completed for each of these projects in a separate environmental assessment at a later date when more detailed information is known about each project and prior to their development?

**Response.** The DEIR/Technical Appendix contains sufficient information and environmental analysis on the proposed Tanforan and Downtown San Bruno Stations and on the ALRS west of Highway 101 for decision-makers to make an informed decision. BART takes very seriously its obligations under CEQA and NEPA and will continue to do so.

The Design Appendix shows the conceptual engineering for the proposed Tanforan and Downtown San Bruno Stations and for the ALRS west of Highway 101. Site plans and sections for the Tanforan Station under the various alternatives, are shown on pages 109, 110, 111, and 112, of the Design Appendix. Site plans and sections for the Downtown San Bruno Station under various alternatives are shown on pages 119, through 122, of the Design Appendix. The site plan and section for the ALRS at the Airport Intermodal Station are shown on pages 123 and 124 of the Design Appendix. The alignment for the ALRS to the CalTrain or BART/CalTrain station west of Highway 101 is shown on page 2-29 of the DEIR/Technical Appendix. An artist rendering of the proposed ALRS is shown on page 2-28 of the DEIR/Technical Appendix.

As described on pages 2-21, 2-26, and 2-36 of the DEIR/Technical Appendix, the environmental analysis evaluates the portion of the ALRS west of Highway 101. The portion of the ALRS east of Highway 101 was evaluated in the San Francisco International Airport Master Plan, certified in May 1992. The portion of the ALRS that crosses over Highway 101 to either a CalTrain Station under the TSM Alternative or a BART/CalTrain Intermodal Station on the Airport property west of Highway 101 under the proposed project and Alternative III is evaluated in the DEIR/SDEIS.

- 66.186. Section 3.2 [ , Land Use and Economic Activity of the DEIR/Technical Appendix]...also fails to compare the San Bruno BART Tanforan Station design with the I-380 Station (Design Option V-A) and San Bruno Downtown (Design Option V-B). The document does not compare these station design options in relation to the Tanforan Station for the following effects: land use and economic activity; traffic congestion and displacement; and environmental and geotechnical concerns.

**Response.** The San Bruno Tanforan Station would be an at-grade station, while either the I-380 Station (Design Option V-A) or the San Bruno Downtown Station (Design Option V-B) would be a subway station. As such, either of the two optional San Bruno subway stations would have more geology-related operational and construction impacts than the Tanforan Station. These additional impacts would include lateral earth pressures on earth retaining structures during seismic events; hydrostatic uplift forces from groundwater; potential corrosive subsurface soils; groundwater control; dewatering-induced settlement; and excavation-induced settlement. On page 3.2-75 of the DEIR/Technical Appendix, the Tanforan, I-380/San Bruno and Downtown San Bruno Stations under Alternative V are compared with respect to land use and economic activity. The Tanforan Station would have the least impact on existing land use and economic activity of the three alternatives because of the large, available parking supply that can be converted to decked parking. Under Alternative V-A and V-B there would be no Tanforan Station.

The traffic impacts of the I-380 San Bruno Station and the Tanforan Station can be compared by reviewing the traffic tables in Chapter 3.1, Transportation, of the DEIR Technical and the traffic

tables in Appendix C of the DEIR/Technical Appendix which lists the impacts for the I-380 San Bruno Station under Alternatives IV and V as well as Design Options V-A and V-B and for the Tanforan Station under the proposed project, and Alternatives III and VI. The Downtown San Bruno Station option was also examined for Alternative V and Design Options V-A and V-B. The traffic impacts of the Tanforan Station were also analyzed under Alternatives IV, as described in Impact 8 on page 3.1-143 in the DEIR/Technical Appendix, and V, as described under Impact 7 on pages 3.1-147 and 3.1-148 in the DEIR/Technical Appendix.

- 66.187. The [General Plan And Zoning] section does not mention that the City of San Bruno has also adopted an additional initiative Ordinance 1446 (An Imitative Ordinance Pertaining to Tanforan Park Shopping Center Allowing Certain Projects to be Constructed and Allowing Reconstruction of Center at Existing Limits in Case of Destruction Due to Disaster, Without Further Voter Approval). This Ordinance was adopted by the city on November 6, 1984. The DEIR should analyze the potential impact of this law, which on its face prohibits certain types of construction at the Tanforan site, and may well impact the potential construction of the proposed parking garage. At a minimum, it may provide the basis for a legal challenge to the construction.

**Response.** Please refer to Response 66.25.

- 66.188. The proposed parking garage that is part of Alternative VI may well conflict with the restrictions imposed by Ordinance 1446. This should be analyzed.

**Response.** Please see Response 66.25 for discussion of this issue.

- 66.189. The analysis of potential effects of BART seems very weak. The DEIR states that project alignment and station location are generally consistent with San Bruno planning policies. The nine General Plan policies are not given individual analysis to support the conclusion of consistency.

**Response.** Although BART does not need to conform to local planning policies, the discussion of the impacts of each alternative indicates where the project would conflict with the planning policies.

- 66.190. Assure adequacy of community facilities and services for present and anticipated needs – Construction of BART and addition of a station on the community could affect the need for facilities and services.

**Response.** Please refer to Responses 16.2 and 16.7 regarding BART's impacts on local community facilities and the agency's measures to reduce calls for service to local municipalities.

- 66.191. Construction of the BART extension could affect the residential character of neighborhoods in the vicinity.

**Response.** The BART extension could affect the residential character of adjacent neighborhoods. See for example the last paragraph on page 3.2-87 of the DEIR/Technical Appendix.

- 66.192. Would BART affect the policy for eventual conversion to industrial park of the area between San Mateo Avenue and Montgomery Street?

**Response.** Proximity to BART could encourage the intensification of land use, which might prompt the city to modify its policy. Existing aircraft and rail noise makes the area more appropriate for business uses than residential ones.

- 66.193. How does the BART extension relate to the policy of designing transportation programs and parking facilities to be compatible with adjacent land uses in order to minimize social and economic disruption to residential and commercial neighborhoods and...traffic circulation?

**Response.** The proposed BART alignments were selected based on many factors, such as available right-of-way, environmental and economic impacts to the surrounding communities as well as geotechnical impacts. The parking facilities have been designed to meet the modeled demand as forecast by MTC's mode choice model. The parking facilities have been designed to be compatible with surrounding land uses and to have the fewest levels for the garage given available space and supply requirements. The final design of the parking garages will be developed in coordination with local community representatives.

Selecting a BART alignment and station locations involves various trade-offs; the goal is to select an alignment that will achieve the project objectives and minimize adverse impacts. See Chapter 1, Section 1.4 of the DEIR Technical Appendix.

- 66.194. A BART station at Tanforan can be supported only if impacts are adequately mitigated; ensure that route and station, design of facilities, parking and offsite improvements minimize negative impacts on existing development, particularly on adjacent residential neighborhoods.

**Response.** The various Tanforan BART stations were designed with considerable input from the planning staff of the City of San Bruno and representatives from the Tanforan Park Shopping Center. Revisions to the Tanforan Station under Alternative VI were presented by the City of San Bruno and the Tanforan Park Shopping Center. Their suggestions have been incorporated into the revised design of the Tanforan Station for the new LPA.

- 66.195. Retain a safe route across railroad tracks to Belle Air (Lion's Field Park).

**Response.** All existing, officially sanctioned routes across the CalTrain/SPRR tracks will be maintained by the installation of decking at existing street crossings as construction activity passes through the area. Existing signals will be maintained or relocated as required. As described on page 3.1-191, Impact 2, of the DEIR/Technical Appendix, the tracks are located on private property, on which trespassing is illegal. Please refer to Response 17.74 for a discussion of vehicle and pedestrian access across Angus Avenue which provides access the CalTrain right-of-way to the Belle Air neighborhood and the Lion's Field Park. Please refer to Response 17.74 for a discussion of vehicle and pedestrian access across Angus Avenue (which provides access across the CalTrain right-of-way to the Belle Air neighborhood and Lion's Field Park.)

- 66.196. Dislocations of residences and businesses vary widely among the Build Alternatives. The number and locations of dislocated properties is very generalized as is the mitigation. It is stated that relocation benefits would be provided but there is no detail as to the extent of those benefits.

**Response.** Please refer to Response 47.12 regarding the reason the DEIR/Technical Appendix does not identify the specific properties that would be displaced. The details of relocation benefits will be included in the relocation plan that BART/SamTrans will be required to prepare when an alternative is selected.

66.197. With the high cost of replacement housing and paucity of land for new construction, it is questionable whether there will be any ability for displaced residents and businesses to relocate within their existing community where they have social and economic ties.

**Response.** The Uniform Relocation Act requires that a Final Relocation Plan (FRP) (included in Volume V, Technical Appendices of this FEIR/FEIS) be performed prior to acquisition and relocation of affected properties. An FRP will be performed subsequent to selection of the LPA for inclusion into the FEIR/FEIS. An FRP is required in part to meet the concerns addressed by the commentor. The FRP will address whether sufficient replacement housing is available within the community of displaced households and the most likely method to mitigate the impact.

66.198. There should be some mitigation for the financial losses that would accrue to local governments from properties displaced and dislocated by the project.

**Response.** As described in Impact 11 on page 3.2-47 of the DEIR/Technical Appendix, there are potentially offsetting short-term and long-term impacts on municipal revenues. BART does not share in the potential long-term benefits that may accrue to the city from intensification of use in station areas.

In addition, the Uniform Relocation Act, does not make provision for compensation to public agencies or local governments. Demonstrable loss of income to public agency or local government is a local government policy issue.

66.199. Fragmentation and division of neighborhoods is not adequately addressed. Some form of compensating redesign should be required for neighborhoods whose residents will have their lives disrupted by the short and long term effects of the project.

**Response.** Fragmentation and division of neighborhoods was a specific criterion used to define a significant land use or visual impact in the DEIR/SDEIS. In particular, page 3.2-85 of the DEIR/Technical Appendix states that a project alternative would create a significant neighborhood/social impact if it disrupted the physical and social arrangements of an established community. Based on this criterion, the environmental document identifies fragmentation and division of neighborhoods as a significant impact for the 1992 LPA, the I-380 Least Cost Design Option, the Base Case Alternative, Alternative IV, and the Downtown and I-380 Station options in San Bruno. Given the location and dimensions of these line segments and station options, there are few mitigations available to BART to reduce the impacts to the neighborhood, short of selecting a different alignment or station location. For example, under the 1992 LPA, the horizontal alignment traverses the Fifth Addition neighborhood. Once the subway line is constructed in this segment, the BART right-of-way can be landscaped but the displacement of homes within the right-of-way and the physical separation created along the right-of-way cannot be avoided. The only means of redesigning the BART extension to avoid this neighborhood impact is to select a different alignment. For this reason, the environmental document declares the neighborhood impact of fragmentation and division to be significant and unavoidable even with implementation of proposed mitigation measures.

66.200. Increased demand for public services is a significant factor that is difficult for a small community with limited tax base to absorb. Mitigation in the form of capital outlay for public services would be appropriate.

**Response.** Section 3.5, Community Services and Facilities, of the DEIR/Technical Appendix, shows that the demand for local public services is expected to be handled with existing staff, equipment, and utility capacities. Capital outlay is not required to mitigate the identified impacts.

because these impacts are not considered environmental impacts pursuant to CEQA (see p. 3.5-9 of the DEIR/Technical Appendix). BART and SamTrans acknowledge that there may be increases in the cost of providing public services following construction of the BART Extension. As noted in Responses 14.57 and 14.59, the cost of responding to emergency calls related to BART is expected to be minimal, and to be adequately covered by existing staff, equipment, and infrastructure. The cost of providing any additional services remains the responsibility of the appropriate jurisdiction.

- 66.201. School and park displacement and disruptions need to be adequately mitigated.

**Response.** The potential impacts of the project alternatives on schools are discussed in Section 3.9, Noise and Vibration, and Section 3.13, Construction/Noise and Vibration. Los Cerritos Elementary School would experience airborne noise in excess of 75 dBA under the Base Case Alternative, and Lomita Park Elementary School would experience increased noise exposure under Alternative V. Mitigation measures to reduce these impacts to an insignificant level include sound walls for retained cut, at-grade, or aerial alignments; absorptive material on sound walls; and closed deck aerial construction (see page 3.9-19 of the Summary DEIR/SDEIS). The appropriate measures will be determined during the preliminary design phase.

Construction-related noise impacts could occur at Los Cerritos Elementary School and at South San Francisco High School. Mitigation measures to reduce these impacts to below a significant level include temporary noise barriers, and use of pre-drilled piles, special hydraulic pile drivers or shielded pile drivers (see page 3.13-25 of the Summary DEIR/SDEIS). If these measures are determined to be feasible during final design, this impact would be significant and unavoidable.

Construction-related activities are also acknowledged to disrupt pedestrian routes to and from schools. Mitigation Measure 3.1 on page 3.13-54 of the DEIR/Technical Appendix calls for BART to meet with school districts early in the construction planning process to identify specific procedures for minimizing disruption of student activities.

Displacement of a portion of the Belle Air Elementary School playground and ballfield under the I-380 Least-Cost Design Option would be significant and unavoidable, since there are no feasible mitigation measures to avoid the school (see page 3.2-64 of the DEIR/Technical Appendix).

Chapter 5, 4(f) Evaluation, of the DEIR/SDEIS and the FRDEIR/S#2DEIS assesses the impacts of the BART extension alternatives on parks in the project corridor. Chapter 5 concludes that nine of the 14 parks in the project corridor could have some degree of impact either from operations or construction under one or more of the BART alternatives. However, as noted in Response 42.3, the construction scenario laydown areas have been modified to avoid Section 4(f) impacts to Bayshore Circle Park. Therefore, only eight of the 14 parks in the project corridor would be affected. The operational and construction impacts on parks in the project corridor are summarized in Table 5-1 on page 5-4 of Chapter 5 (please refer to Response 19.16 for revisions to Table 5-1). Mitigation measures are described on pages 5-3 through 5-15 for each parkland impacted. Such measures include full restoration of the park after the construction period, modification of proposed structures to avoid the park, and relocation of the park to a nearby location.

- 66.202. If a portion of Alternative VI through San Bruno is constructed by cut-and-cover, the disruption would result in economic disaster to the local businesses and an intolerable existence for the residents. This potential impact is not addressed in the EIR. The full social and economic impacts of this alternative must be discussed, in detail, so San Bruno will be able to see the true nature of this project; be able to fairly assess it; and be able to fairly determine whether or not to support or oppose it.

**Response.** Construction impacts are discussed in Section 3.13 of the Summary DEIS/SDEIS, with additional detail available in Section 3.13 of the DEIR/Technical Appendix. The analysis acknowledges that construction impacts would be significant and unavoidable. However, BART will develop a phased construction plan for downtown San Bruno to reduce the impacts.

- 66.203. When it is said that there would be 50 to 60 truckloads per day of tunnel muck, does that mean an equal number of empty trucks returning to the tunnel portal? The real impact might well be twice what had been set forth in the EIR.

**Response.** The commentor is correct, the 50 to 60 truckloads per day hauling out tunnel muck under Alternative VI would mean an equal number of empty trucks traveling to the tunnel portal under Alternative VI. Both ends of the trip were considered in assessing traffic impacts during construction.

- 66.204. The feasibility of off-site mitigation of noise and vibration impacts is questioned, particularly in the case of older structures.

**Response.** It is not clear to which buildings this comment is referring, although it appears that the comment refers to "off-site" groundborne noise and vibration mitigation for BART operational impacts. As mentioned in Response 66.66, this form of mitigation would be limited to lightweight structures. Where larger or older buildings structures unsuitable for isolation, would be affected, BART would implement mitigation within its own facilities. No businesses in San Bruno would be included for off-site mitigation.

- 66.205. Although a number of potential revenue sources have been identified, there is no assurance that these sources will be available to fund the unfunded local share. These potential sources include: Regional Gas Tax (2 cents per gallon); requires legislative approval and regional vote, \$2 Vehicle Registration Fee; requires legislative approval, \$1 bridge toll; requires legislative approval, \$.05 regional jet fuel tax; would require legislative approval, Dedication of State jet fuel sales tax; would require legislative approval, Increase FTA New Starts funding from 75 percent to 80 percent; requires MTC approval, BART parking charge in San Mateo County; requires SamTrans approval, Surcharge on Peninsula BART stations, except Airport; SamTrans approval, Surcharge at Airport Station; requires BART approval, San Francisco International Airport funds, Airport Passenger Facilities Charge; \$1 to \$3 per enplaning passenger. There is no analysis of which, if any, of the above financing sources would be available to close the large gap between existing and required financing for the BART extension.

**Response.** Please refer to Responses 30.33 through 30.35 for a discussion of potential revenue sources, and Response 14.93 for a discussion of the financial plan included in the DEIR/SDEIS.

- 66.206. What are the attitudes of the agencies responsible for implementing the potential financing, particularly SamTrans and the Airport Commission?

**Response.** SamTrans and the San Francisco Airports Commission are committed to providing a portion of the resources necessary to extend BART service into San Mateo County and to SFIA. SamTrans is a co-sponsor of this report and the project, indicating its willingness to participate in funding the project. SamTrans will benefit by increased service to its jurisdiction and by being relieved of responsibility to provide express bus service from the County to San Francisco. SFIA will benefit by meeting some of its responsibility to relieve regional streets and highways of airport-related traffic as its operations expand.

In a letter responding to the DEIR/SDEIS dated March 10, 1995, SFIA management states, "SFIA favors mass transit as a means of alleviating regional greenway congestion in the area....An extension of BART to the airport would provide airport employees and passengers with an additional commute option. The San Francisco Airports Commission has pledged cooperation to implement its Master Plan projects in a way that would not foreclose any of the extension alternatives being analyzed by BART. SFIA will continue to work closely with BART on the extension of the BART system to the airport."

- 66.207. Is it realistic to assume that any of the affected cities are going to participate in financing the project? What are the real financial parameters of this project? And where will the money really come from? In short, can this project really be funded?

**Response.** Please refer to Response 19.21 for a discussion of the role of the cities in funding the project, and Response 14.93 for a discussion of the financial plan included in the DEIR/SDEIS.

- 66.208. The format and information contained in the BART Extension DEIR/SDEIS does not present public agency policy makers or the general public with a clear and concise description of the project in the Summary of the various documents. There is no general description of the project (i.e., The project is to extend the existing BART line approximately six miles south from the Colma Station to the San Francisco International Airport. Station locations have been proposed in South San Francisco, San Bruno and Millbrae). Neither the Executive Summary of the DEIR/SDEIS BART-San Francisco Airport Extension document, nor the Summary of the DEIR/SDEIS BART-San Francisco Airport Extension document, nor the DEIR/Technical Appendix provide a simple, general description of the projects.

**Response.** Chapter 2, Project Description and Alternatives, of the Summary DEIR/SDEIS contains a comprehensive description of the project corridor, the alternatives considered in the Summary DEIR/SDEIS, the costs associated with each alternative, and the alternatives selection process. Table 2-2 and Figure 2-10 are particularly useful for an overview of the alternatives studied.

- 66.209. The maps provided in the BART-San Francisco Airport Extension DEIR/SDEIS Design Appendix could be described as technical engineering maps, which are typically found in construction specifications. The maps in the Design Appendix are not topographic as generally preferred by the guidelines (Section 15124(a)). The level of specificity of both the maps and the technical descriptions of the project concerning its environmental impacts and mitigation confuse both policy makers and the general public and make it difficult to understand the environmental effect of the projects. BART- Extension environmental documents are therefore in conflict with CEQA, Sections 15121 and 15124.

**Response.** The maps included in the DEIR/SDEIS Design Appendix are technical engineering maps and provide detailed descriptions of the project alternatives for interested parties. The Design Appendix maps are merely descriptive while the maps within each section of Chapter 3, Environmental Analysis, are meant specifically for policy makers and the general public to use in analyzing each alternative. Examples of these latter types of maps are found in the DEIR/Technical Appendix in Section 3.1, Transportation, pages 3.1-89; Section 3.3, Visual Quality, pages 3.3-3, and Section 3.7, Biological Resources, pages 3.7-3, 3.7-13, 3.7-22 among others. These maps comply with CEQA Guidelines by showing the precise location and boundaries of the proposed project without supplying extensive detail beyond that needed for evaluation and review of environmental impacts.

66.210. The BART–San Francisco Airport Extension DEIR/SDEIS is not consistent in format level of specificity. DEIR/Technical Appendix [Section] 3.13 does not provide a list of specific properties with addresses or parcel numbers in the City of San Bruno which would be displaced by the construction or building of the project.

**Response.** Please refer to Response 47.12 regarding the reason the DEIR/Technical Appendix does not identify the specific properties that would be displaced.

66.211. Why is this level of both historical and architectural specificity provided for individual projects within the project area when none of the cities' general plans designate an historical preservation district?

**Response.** BART's cultural resources studies were required to be conducted in compliance with federal legislation because federal funds support the BART–San Francisco Airport Extension. Historic districts, sites, structures or objects that qualify for listing on the National Register may thus be present in a given city even though that city's general plan does not designate an historic preservation district.

66.212. Although the CEQA guidelines indicate that the use of a Master Environmental Assessment is an optional section which can be included in an EIR, it would be desirable that such an assessment be included in the BART–Extension DEIR/SDEIS. Because of the complexity of the project and that any project alternative could be chosen as the project to be developed, a chart or matrix which lists as well as ranks, all the various alternative project environmental impacts and their mitigation, could be very helpful to both agency policy makers and the general public in better understanding the effects of the project on the environment.

**Response.** The commentor is correct in stating that MEAs are optional under CEQA. However, the use of an MEA would create redundancy within a document like the DEIR/SDEIS. Each section within Chapter 3, Environmental Analysis, contains the baseline conditions and the impact and mitigation analysis of that particular issue area for each alternative considered in the DEIR/SDEIS. In light of this analysis, an MEA is unnecessary.

A comprehensive comparison of alternatives is contained in Section 3.2.4, Comparison of Alternatives, starting on page 2-77 of the DEIR/Technical Appendix. Table 2.4-2 on pages 2-83 through 2-97 compares key environmental consequences of the various alternatives and highlights impacts that would remain significant and unavoidable even with the recommended mitigation measures.

66.213. If an on-site or upland site is not found (DEIR 3.7-39) BART should consider off-site mitigation including the creation of a mitigation bank or the purchase of an established mitigation bank that has been approved by the required agencies. Understand that the cost may be estimated at around \$550,000.00 or more per acre.

**Response.** Offsite mitigation is often desirable, and various agencies and municipalities have been consulted about a suitable off-site mitigation location, if necessary. It is understood that the cost of offsite mitigation varies, based on land costs, requirements to enhance, location, amenities, etc.

66.214. The 450 feet of access road and parking area BART plans to construct requires mitigation. This need has not been included in the proposed mitigation, and affects the United States Fish and

Wildlife Service permit as well as the responsibility to the California Environmental Quality Act/National Environmental Protection Act (CEQA/NEPA).

**Response.** It is unclear what “450 feet of access road and parking area” the commentor is referring to. The commentor may be referring to a temporary access road that would be constructed on a trestle or series of bridges between two seasonal wetlands immediately west of Highway 101. There are two construction options that would avoid wetland impacts such that no mitigation would be required. If wetlands habitat is impacted, the impact would be temporary and can be mitigated at the end of the construction period. Wetland impacts and mitigation have been discussed with the appropriate regulatory agencies throughout the EIR/EIS process and these are presented in Volume V of the FEIR/FEIS. Please refer to Responses 14.69, 14.71 and 4.4 for discussions of the environmental certification process and the mitigation measures proposed for project impacts.

- 66.215. The Wetland Area adjacent to Lions Field is defined as waters of the United States. BART plans to use this area as an equipment storage and maintenance yard. The operation must be addressed as it relates to contamination from equipment, solvents, oils, grease, drilling fluids, and any other contaminants. The continued movement of extremely large and disruptive equipment into and away from this wetland area and endangered habitat will destroy its use as a habitat.

**Response.** The proposed tunnel boring launching and equipment laydown area at Lions Field does not include the wetlands associated with Cupid Row Canal. This proposed laydown area would be immediately next to this Canal but not include it. Solvents, grease, oils and drilling fluids would not likely enter Cupid Row Canal because the Canal would be separated from the laydown area by its existing earthen levee. The USFWS has been consulted to define suitable mitigation measures to minimize or compensate for the potential impacts noted in the comment.

- 66.216. Also understand that you address this as a temporary maintenance yard for two years but, based on BART's past project completion schedule, that time most likely will increase by 15 to 20 percent or more. Into what Agency Motel have you planned to register the San Francisco Garter Snake (SFGS) and the other endangered and threatened species for this two-year or longer time period as you use their habitats for this “temporary” maintenance yard?

**Response.** Construction-related impacts to biological resources are discussed in detail in the DEIR/Technical Appendix on page 3.13-20 through 3.13-145. Each specific construction impact, including those resulting from the maintenance yard, was addressed in the environmental analysis and in the Biological Assessment. The mitigation plan developed in consultation with the resource agencies proposes appropriate and specific mitigation to avoid, minimize, or compensate for all significant impacts related to construction.

- 66.217. I did not notice a line item cost for the restoration or the reconstruction of the habitat. The wetland area in question is now an official Endangered Species Habitat Area. The damage repair could require off-site mitigation at 4:1 or 5:1 at a cost of \$550,000.00 per acre X 17+ = \$9,350,000.00. Of course, any mitigation should be constructed and fully functional prior to destruction of the existing wetlands and habitat.

**Response.** The west of Bayshore parcel supports three sensitive species, the endangered San Francisco garter snake (SFGS), the threatened California red-legged frog, and the candidate for listing San Francisco forktail damselfly. The commentor's estimate of mitigation acreage and costs appear to be high. Costs and acreage are provided in the Mitigation Monitoring and Reporting Plan available for review from BART.

- 66.218. In addition, BART should provide a list of all contaminated material to be stored or used at the site and present this list to the California Department of Fish and Game and USFWS as well as provide emergency response personnel for any cleanup, with that abatement plan approved by the above noted agencies.

**Response.** Standard regulations regarding hazardous materials require listing of materials used or stored as part of the project. These lists will be prepared prior to construction and will be available for regulatory agency review. Emergency response procedures are discussed on page 3.11-11 of the DEIR/Technical Appendix. As described, BART will adhere to procedures identified in the *San Francisco BART Emergency Plan*, which describes procedures to be followed in the event of an accidental release of a hazardous material. Please refer to Response 28.3 and page 3.13-207 of the DEIR/Technical Appendix for a discussion of the proposed BART Hazardous Materials Contingency Plan which will specify the emergency response and hazard communication procedures to be followed in the event that hazardous contamination is discovered during construction.

- 66.219. The endangered and threatened species and the reconstruction of its habitat should also address an ongoing, cumulative impact as well. In addition the lead agency should develop an overall wetlands and endangered and threatened species management plan in order to address the cumulative impact with input from all property owners and those holding easements and maintaining services and utilities in this sensitive area. This would assure consideration from all the agencies with regard to their further plans for developing this area and would meet BART's CEQA/NEPA responsibility.

**Response.** The DEIR/SDEIS addresses cumulative impacts for all alternatives and existing impacts under the No Build Alternative. BART has been in consultation with the SFIA and the USFWS to develop such a comprehensive plan, for which SFIA would have primary responsibility as the land owner.

- 66.220. What provisions have been made to protect the SFGS and other threatened and endangered species, with regard to the car wash building, the emergency repair pit, other buildings and the access road to these buildings?

**Response.** Suitable protection and mitigation measures for improvement to SFGS habitat have been developed in consultation with the regulatory agencies, including Mitigation Measure 10.1 which addresses the need to protect the SFGS from proposed facilities. These measures are included in Section 3.7 of the DEIR/SDEIS and in the Mitigation Monitoring and Reporting Plan available for review from BART. Please also refer to Response 66.131, for a discussion of the effectiveness of Mitigation Measure 10.1.

- 66.221. BART is required to meet its NEPA/CEQA responsibility by having - at the very least - core samples analyzed and publishing the results and thereby advising the public and other agencies what they will have to deal with as far as the contamination. (pages 3.13-214, 3.13-215 of the DEIR/Technical Appendix)

**Response.** Prior to right-of-way acquisition, BART will sample and analyze soil and/or ground water along the project corridor to test for the presence of hazardous materials. This mitigation measure, i.e., site sampling and remediation, for all project alternatives is described in Section 3.13.14, Construction/Public Health of the DEIR/Technical Appendix (see pages 3.13-206 through 3.13-216).

66.222. Where are the material and soil stock piles located? What type of materials will be stockpiled? Will this list be sent to local hospitals and research centers to see if any accidental release of any of these items will be able to be adequately handled without endangering life forms of any kind? For instance, if one of the many pipe lines to the airport carrying aviation fuel suddenly ruptured, what would be the worst case scenario that people could expect, what would be the effect on threatened and endangered species as well as on human life?

**Response.** Standard construction practices will be employed and compliance with regulatory requirements regarding hazardous materials will be followed. Accordingly, any fill materials containing contaminants will be immediately remediated. Generally, fill is removed via trucks upon excavation; any short term piling of non-contaminated fill would be within designated construction staging areas. With regard to disruption of aviation fuel pipes or other utilities, BART has identified or will identify all utilities and will develop construction methods to avoid or accommodate this type of infrastructure. As a result, the type of disruption to the public described here is not anticipated. BART, like other agencies, is required to develop plans for emergency response, and also would coordinate with utility owners during construction adjacent to their infrastructure. BART is required to certify the right-of-way which includes identification of all high risk pipelines which must be physically located by pot-holing.

The likelihood of fuel line rupture at SFIA and the vicinity is very low. The location of airport fuel pipelines is identified in the SFIA Master Plan and would be confirmed with SFIA. Therefore, the precise location and depth of fuel pipeline would be identified during the pre-construction planning process prior to any ground disturbance. In the unlikely even that a fuel line is ruptured during construction activities, a worst-case result could be an explosion, contamination of solid and groundwater with leaking fuel, and injury to construction workers. On SFIA property, all construction work would be performed by Airport construction contractors and emergency response would be the responsibility of SFIA. If a pipeline rupture were to occur as a result of construction activities performed by BART construction contractors, emergency response would be provided pursuant to applicable federal, state, and local regulations and in accordance with the BART Hazardous Materials Contingency Plan (see Mitigation Measures 1.1 on page 3.13-207 of the DEIR/Technical Appendix). Site sampling and remediation would be performed if necessary as described under Mitigation Measure 1.2 on page 3.13-208.

66.223. Address the potential for noise and vibration impact on utility lines and related structures. Will tunneling or boring work affect surface uses, and to what extent?

**Response.** Please refer to Response 12.6 for a discussion of vibration effects on utility lines. Tunnel boring can create perceptible vibration for a short period of time if buildings are directly above a tunnel. (As the underground tunnel boring machine passes below a sensitive receptor, we estimate that vibration would be perceptible for approximately 2 days before and 2 days after the machine passes under the receptor.) Occupants of buildings that are farther away will probably not be aware of vibration. There would be no significant impacts from this construction activity.

66.224. What specific impacts are anticipated on each of the properties listed in the project area? The potential impact to existing facilities or their relocation is not addressed. Will reduced rights of way cause maintenance problems? Will increased land development cause access problems. Will the project cause the relocation of certain buildings or businesses, and what will be the effect? Address potential impact to existing facilities.

**Response.** It is not possible to be more specific about the construction impacts of the BART extension project at this time. Please also refer to response 47.12 for further discussion. The estimated projected number of businesses and residences that would be displaced under each

alternative either temporarily during construction or permanently have been identified. The areas where the most acquisition would occur are delineated on Figures 3.2-13-18 of the DEIR/Technical Appendix. Please refer also to Response 16.16 regarding relocation impacts.

- 66.225. Address the requirement of availabilities of services and a contract for development affecting groundwater sources, new sources of water and sewer services from the City and County of San Francisco and other municipalities.

**Response.** The ability of local municipalities to satisfy the water and wastewater treatment requirements imposed by a BART extension are addressed in Section 3.5, Community Services and Facilities, of the DEIR/Technical Appendix. The project itself would not trigger any significant demands, as the analysis shows that the required volumes of water and wastewater would be relatively minimal. The need for new water and sewer services is a condition that may arise under the cumulative scenario that encompasses both the BART extension and projected growth in each of the municipalities through the year 2010. By 2010, BART's contribution to these demands would be minimal.

With specific respect to the City and County of San Francisco, the BART extension would require services only under Alternative IV, Design Option V-A, and Alternative VI – those alternatives with an airport station east of Highway 101. The BART station is projected to generate a water demand of .004 mgd, compared to the 2.4 mgd demand by airport operations in 2010. The *SFIA Master Plan Final EIR* indicates this demand may be met if water conservation techniques are implemented. For wastewater, BART is projected conservatively to generate .004 mgd of wastewater, which combined with projected flows from airport operations, would consume 80 percent of the SFIA's wastewater treatment plant capacity. Consequently, sewer services are not projected to be adversely affected.

- 66.226. Address the incorrect identification of City and County of San Francisco Water Department property and other incorrectly identified property.

**Response.** The plan and profile drawings will be revised to properly show San Francisco Water Department property. Revised Design Appendix will correct necessary incorrect identification of property ownership. The City and County of San Francisco Water Department Property extends from Colma through Millbrae into Burlingame.

- 66.227. According to Northwest Information Center (NWIC) Historical Resources Information System records, archaeologist Carolyn Rice conducted a record search for this project in 1993 for Ogden Environmental. Carolyn Rice's report should be forwarded to NWIC.

**Response.** One copy each of the final Archaeological Survey Report and Archaeological Resources Technical Report prepared by Carolyn Rice, Consulting Archaeologist, were forwarded to the NWIC on February 3, 1995.

- 66.228. The Historical Resources Information System Records Office of NWIC has not yet received its copy of the DEIR or DEIS from BART for this project, which, in the normal routing system, they should have received by now for their review.

**Response.** One copy each of the Historic Architectural Survey Technical Report and Historic Resources Evaluation Report of Seven Colma Cemeteries, both prepared by Laurence H. Shoup and Mark Brack, were forwarded by BART to the Northwest Information Center, Sonoma State University on February 3, 1995. The Historical Resources Information System Record Office of

NWIC was contacted in March 1996 and an additional copy of the DEIR/SDEIS was forwarded as necessary. Additional copies are available by contacting Mr. Alan Lee, BART's Planning Coordinator.

- 66.229. Given the environmental setting of the project area, there is a potential for harming Native American sites in the unsurveyed portions of the project area, as we have been advised by Sonoma State University and NWIC.

**Response.** The project area has been surveyed for Native American sites. There is a potential for harming potential subsurface Native American sites in the project corridor, as stated on page 15 of the Archaeological Survey Report. Mitigation Measure 2, Memorandum of Agreement (page 3.4-10, last paragraph, Summary DEIR/SDEIS) has been developed to address impacts to potential, significant archaeological deposits. Please refer also to Responses 12.4, and 16.3 for further mitigation details.

- 66.230. Review of historic literature and maps on file indicates that there are approximately six historic structures within or adjacent to the project area. These structures were depicted on the General Land Office (GLO) plats as Twelve Mile House, Lux's House, San Bruno House, Irish House, and Frenchman's House (GLO 1858 and 1864)....The BART route also passes through or adjacent to many historic cemeteries as it nears Colma. With these factors in mind, there is a possibility of destroying historic cultural resources in the project area, such as historic period burials.

**Response.** The Archaeological Survey Report, Historic Architectural Survey Report, and historical research for this project all indicate that the Twelve Mile House, Lux's House, San Bruno House, Irish House, and Frenchman's House are all either well outside the Area of Potential Effects (APE) for this project or have been torn down. None of these structures were located close enough to the construction zone to make it probable that historic period remains exist underground in the area that would be impacted. An Historic Resources Evaluation Report has been prepared for those Colma cemeteries that could be affected by the project, and appropriate mitigation measures are currently being developed as part of several MOAs between and among relevant parties. The location of other historic period burials, if located outside formal cemeteries, cannot usually be predicted. BART construction crews would monitor for signs of both prehistoric and historic cultural resources and human burials and contact a qualified archaeologist if such resources are encountered during project construction. Please also refer to Responses 6.29, 12.4, 16.3 and 66.32 regarding archeological resources discovered during construction.

- 66.231. Since it is most likely that Native American burials may be uncovered in this project area, what line item cost has been given to this phase of the project? As I am sure you are aware, the cost related to this phase of the project could run anywhere from several hundred thousand dollars to possibly a million.

**Response.** Please refer to Response 66.77 for a discussion of potential mitigation costs in the event that human burials are encountered during project implementation.

- 66.232. Clarification of ownership and purchase status of all lands in project area (e.g., purchase of easements, right-of-way, fee, lease, own land, variances, etc.)

**Response.** Further clarification of all the acquisitions and easements that will be required for this project will be provided by the BART Real Estate Department after the project has been adopted.

66.233. According to the tables presented in the EIR/EIS, the percentage of SFIA workers and patrons using transit will be significantly lower after this BART extension is completed. Where is the benefit, under these conditions, to justify the costs?

**Response.** Please refer to Response 66.36 for a discussion of percentages of air passengers and airport workers using transit to the SFIA.

66.234. Table 3.1-67 [of the DEIR/Technical Appendix], predicting daily trips by mode to SFIA under Alternative VI, presents transit modal split figures substantially lower yet justifies them as an "increase" in transit usage. Work trip modal split was 12.8 percent; under Table 3.1-67, it has deteriorated to 9.5 percent. Air passengers were 28.5 percent; under Table 3.1-67, transit use is lowered to 17 percent.

**Response.** This comment is comparing transit mode split between Table 3.1-2, "SFIA Airline Passenger and Employee Access Modes, Percent Distribution" to Table 3.1-67, "Alternative VI Daily Trips by Mode to the SFIA." These two tables are not comparable because Table 3.1-2 is based on survey data while Table 3.1-67 reports the results of MTC's travel demand model. The correct comparison is to Table 3.1-22, "Alternative I- No Build, Daily Trips by Mode to the SFIA" from which the 1993 transit work trip mode split to the SFIA is calculated to be 6.1 percent while the 1993 transit air passenger trip mode split to the SFIA is 12.0 percent. In Table 3.1-67, with the BART extension, the 2010 transit work trip mode split to SFIA is calculated to increase to 9.5 percent while the transit air passenger mode split is 17.0 percent.

66.235. Table 3.1-2 [of the DEIR/Technical Appendix] does not provide trip numbers or breakdown data. However, if those trips are assumed to be in the same proportion as Table 3.1-67, then the overall surveyed percentage of passengers and employees utilizing transit to SFIA is 22.8 percent. Under Table 3.1-67 Alternative VI to SFIA, the overall percentage of trips utilizing transit has shrunk to 14.2 percent, a drastic loss of 38 percent of the transit mode share.

**Response.** These percentages derived from the MTC model cannot be compared against the survey number in Table 3.1-2, SFIA Airline Passenger and Employee Access Modes Percent Distribution, in the DEIR/Technical Appendix. Please refer to Table 3.1-8, Daily Trips by Mode to SFIA, in the DEIR/Technical Appendix, which contains the total number of trips to the SFIA for all alternatives, as well as footnotes defining these mode categories. Table 3.1-8 is based on MTC's travel demand model. As indicated in the table, mode choices to the SFIA vary among the alternatives. The transit share of the No Build Alternative in 1993 is 9.4 percent, as estimated from Table 3.1-8, and would increase to 14.6 percent among all of the BART build alternatives, as estimated from the same table in the DEIR/Technical Appendix. The categories in the two tables cannot be neatly compared because on-call transit includes both taxis and shuttle buses, while the auto category includes taxis and the bus category includes shuttle buses.

As noted in Response 66.239, Table 3.1-2 is revised to reflect the updated survey data.

66.236. Despite the fact that the percentages of transit use displayed in Table 3.1-67 [of the DEIR/Technical Appendix] are considerably at variance with surveyed transit use, the transit percentages cited in Table 3.1-67 show an artificial rigidity. That is, whether cited for 1993, 1998 or 2010...a span of 17 years...the transit mode split is assumed to be exactly the same, 17 percent for air passenger, 9.5 percent for employee and 14.2 percent overall. Why isn't increasing traffic congestion assumed to trigger mode shift, thus increasing transit usage over the years? Are there no other, inexpensive improvements planned for transit over this generation of time, which would improve transit's modal split?

- Response.** Transit service is assumed to be the same in all three analysis years under Alternative VI. The increase in traffic congestion forecast between 1993 and 2010 would be too small to cause significant shift in mode shift as calculated by MTC's travel demand model.
- 66.237. Table 3.1-2 of the DEIR/[Technical Appendix]....mentioned previously, derived their mode split percentages from actual survey data, interviewing real people. Table 2.12, from the Technical Report, utilizes estimations and "Patronage Forecasts" to assert much lower transit usage. How does a report published in December of 1994 use forecasts to estimate modal splits in 1993, and where does this information come from?
- Response.** Please refer to Responses 66.235 and 66.236 for a discussion of transit mode split. Note that Table 2.12 from the Transportation Technical Report is a summary table that includes the total SFIA trips as presented in Table 3.1-67.
- 66.238. Table 2.12 [of the Transportation Technical Report], which seems to bear little relation to surveyed reality, is the underpinning and justification for asserting BART to SFIA will create additional transit trips, thereby justifying the expenditure of over \$1.2 billion dollars of public funds. Yet transit trips and the transit portion of the modal split forecast for 1993, 1998 and 2010 are all substantially below existing, surveyed transit usage levels. The logical conclusion of this inconsistency is that extending BART to SFIA is an unjustified waste of public monies. These discrepancies need to be fully and clearly reviewed then repaired rather than excused. The crucial data within the DEIR relating to SFIA mode split needs to be expanded, plus developed and presented in a logical and consistent manner. The existing presentation within the DEIR is illogical, inconsistent to the extreme, and damaging to the case of extending BART.
- Response.** Please note that Table 2.12 in the Transportation Technical Report is the same table as Table 3.1-8, Daily Trips by Mode to SFIA, in the DEIR/Technical Appendix. Please refer to Response 66.235 for a discussion of a comparison of the survey data in Table 3.1-2 to the model results in Table 3.1-8.
- Please refer to Response 66.239 for an updated version of Table 3.1-2, SFIA Airline Passenger and Employee Access Modes.
- 66.239. Table 3.1-2 [of the DEIR/Technical Appendix] presents modal distribution with a basic categorization of air passengers and employees. Table 3.1-67 categorizes air passengers to include visitors, and employee work trips to include "other". What's "other"? Does this include air-freight-related truck trips? If so, they should be removed from the totals, since they are neither auto nor transit related. Before and after tables need to be presented in a clearly consistent manner, with the same breakdown of trip type.
- Response.** Based on new survey data, the mode access table (Table 3.1-2) is revised on the following page, with the "Walk/Bicycle/Other" category accounting for less than two percent for either air passengers or employees.
- 66.240. Table 3.1-2 [of the DEIR/Technical Appendix] breaks out scheduled transit trips and the on-call bus and van transit trips utilized by many thousands of air passengers. In Table 2.12 of the Technical Report, "shuttle busses" are included under the bus category. What happened to the very substantial category of van shuttle transit services? Are they also included under the bus category? Are they included in the auto category, although they are clearly paid public transit to and from the airport? Have they disappeared altogether? Do BART and/or SFIA perhaps intend to terminate van shuttle services once BART is operating?

**Response.** The van shuttle services are included in the bus category in Table 2.12, Daily Trips by Mode to SFIA, in the Transportation Technical Report. BART has no intention of terminating van shuttle services with the BART extension. Please note that Table 2.12 in the Transportation Technical Report is the same table as Table 3.1-8, Daily Trips by Mode to SFIA, in the DEIR/Technical Appendix. Please refer to Response 66.239 for an updated version of Table 3.1-2, and to Response 66.235 for a discussion of comparing the survey data in Table 3.1-2 with the model results in Table 3.1-8.

**Table 3.1-2**  
**SFIA Airline Passenger and Employee Access Modes**  
**Percent Distribution**

Access Mode	Airline Passengers	Employees
Rental Car	49.8	19.6%
Private Car	45.6	46.1
Dropped Off	included above	
Carpool	0.0	11.8
Vanpool	0.0	3.9
Scheduled Transit	9.8	3.3
On-Call Transit*	48.7	23.0
Other	6.1	1.8
Taxi	6.1	0.0
Charter Bus	1.2	5.0
Walk/Bicycle/Other	0.8	1.9
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>

Sources: MTC, "Air Passenger Survey 1990," September 1991

SFIA, "1991 Airport Employee Work Travel Survey," July 1992

\* Includes on-call van service, "Airporter" express buses, hotel/motel courtesy vans, and luxury limousines

Air-freight-related truck trips are not included as an air passenger or employee mode of access to work.

66.241. There are also questions to be asked about time. Daily trip counts reflect the fact that SFIA is a 24-hour operation. BART is not. Table 2.2-1 indicates 20 minute headways during the key evening time period. What percentage of air passengers and employees will be at SFIA during this time period, and when BART is not in operation? The p.m. peak period is also the traditional time when traffic and mode split are carefully reviewed, yet there are no breakouts of this information either.

**Response.** The forecasts of transit patronage, including work trips to the SFIA, reflect scheduled transit service. The change in BART headways during off-peak periods and BART service times are incorporated in MTC's mode choice model that forecasts work trips to and from the SFIA by transit mode.

Transit usage is reported only on a 24-hour basis. The MTC model employs peak and off-peak transit networks by assuming work trips are primarily affected by peak transit headways and non-work trips are typically associated with non-peak periods. Otherwise, the model does not estimate peak hour transit usage.

Traffic analysis was performed for A.M. and P.M. peak hours. Various methods can be employed to estimate off-peak results but as there are no transit impacts during the off-peak hours, this time period has not been studied separately in the DEIR/SDEIS.

- 66.242. Finally, the assumptions underlying the assertion that any BART alternative to the airport will automatically improve transit utilization need to be publicly explained and reviewed. Are these all new trips? Are they shifts from other modes of travel, and if so, from where? There is agreement that additional auto travel to and through the airport area will increase congestion. Won't that increased congestion, in and of itself, generate more use of existing transit options? Aren't van shuttle services more flexible and convenient? Won't various Transportation Systems Management measures, in conjunction with increased congestion, significantly improve transit usage at less cost?

**Response.** As shown in Table 3.1-8 in the DEIR/Technical Appendix, Daily Trips by Mode to SFIA, the BART build alternatives would all result in a substantial net increase in transit ridership, even taking into account transfers between modes, with a corresponding decrease in auto trips. Auto trips to the SFIA under the No Build Alternative in 2010 would be 213,400 and would decrease to 203,100 trips under Alternative VI. Auto trips would also decrease to 207,700 trips under the TSM Alternative but would amount to 4,600 more trips than under Alternative VI. Overall transit use would also increase under the BART build alternatives compared to the No Build and TSM Alternatives even when adjusting for the impact of transfers between different transit systems.

Table 3.1-3, Regional Transit Person Trips (Linked Trips) Daily Volumes by Trip Purpose and Year, in the DEIR/Technical Appendix, presents the number of transit trips after removing the impact of transfers between systems for all the alternatives. Linked transit trips would increase by 23,400 under Alternative VI compared to the No Build Alternative in 2010, while the number of linked transit trips under the TSM Alternative would increase by 9,600 compared to the No Build Alternative in 2010. The effects of traffic congestion and improved transit service both contribute to increased transit patronage. Increased traffic congestion without transit service improvements would not necessarily produce a noticeable increase in transit patronage, especially for bus service, which would encounter the same traffic congestion.

Van shuttle buses would be more or less convenient compared to BART, depending upon the frequency of service and total travel time to the ultimate destination, taking into account highway congestion and whether the service is point-to-point or door-to-door with multiple pickup and discharge stops. Detailed mode choice micro-modeling was accomplished to determine the net transit patronage impact between BART and bus modes, and the results have indicated that the BART build alternatives would provide greater increases in the transit mode share compared to autos compared to the TSM Alternative, which primarily relies upon increases in bus service.

- 66.243. The portion of the DEIR pertaining to SFIA trips and modal split should be expanded, organized and presented in a consistent manner. Tables, other information and conclusions must be presented in a logical and understandable form, in order to justify this expenditure of public funds.

**Response.** The information on trips by mode to SFIA is thorough, organized, and consistent. Table 3.1-8, Daily Trips by Mode to SFIA, in the DEIR/Technical Appendix, presents mode access information to the SFIA for all alternatives to compare relative changes among alternatives. Tables in the Analysis by Alternative subsection of the Section 3.1 of the DEIR/Technical Appendix separates the information on daily trips by mode to the SFIA according to air passengers, employees and others. These include Table 3.1-15, Proposed Project Daily Trips by Mode to the San Francisco International Airport, as well as Tables 3.1-22, 3.1-28, 3.1-35, 3.1-43,

**Table B-36A**  
**Alternative V-B - Minimum Length Subway to San Bruno**  
**Transit Travel Times (Minutes)(1)**  
**A.M. Peak Period (2010)**

Origins		Destinations				
		S.F. State	S.F. Civic Center	Union Square	Maritime Plaza	Oakland Center
Hillsdale	Travel Time	45	50	51	54	65
CalTrain	Change From No-Build	-29	-9	1	1	-4
Airport Intermodal Station Site	Travel Time	28	33	34	37	48
	Change From No-Build	-19	-12	-5	-5	-9
SFIA Terminals	Travel Time	34	39	40	43	54
	Change From No-Build	-17	-4	-8	-9	-9
So. San Francisco	Travel Time	43	46	37	40	55
CalTrain	Change From No-Build	-12	0	0	0	0
Hickey	Travel Time	24	29	30	32	46
BART	Change From No-Build	-6	-19	-8	-5	-8

Source: Parsons Brinckerhoff, January 1994

(1) Travel times include walk or transit access time to final destination. It does not include origin station access time which varies depending on location of travellers residence. Travel times assume utilization of the fastest transit mode (i.e., bus, BART, or CalTrain). Times shown are unweighted.

**Table B-36A**  
**Alternative V-B - Minimum Length Subway to San Bruno**  
**Transit Travel Times (Minutes)(1)**  
**A.M. Peak Period (2010)**

Origins		Destinations					
		Kaiser Medical	Tanforan Shopping	San Bruno City Hall	Hillsdale Shopping	SFIA Terminals	UAL (SFIA)
12th Street BART (Oakland)	Travel Time	41	47	58	82	54	57
	Change From No-Build	-24	-27	-15	-4	-7	-23
Montgomery St. BART	Travel Time	32	34	43	67	39	42
	Change From No-Build	-18	-25	-15	-6	-5	-9
Civic Center BART	Travel Time	28	30	39	63	35	38
	Change From No-Build	-18	-25	-15	-8	-2	0
Daly City BART	Travel Time	13	15	24	48	20	23
	Change From No-Build	-11	-18	-9	-23	-30	-19

Source: Parsons Brinckerhoff, January 1994

(1) Travel times include walk or transit access time to final destination. It does not include origin station access time which varies depending on location of travellers residence. Travel times assume utilization of the fastest transit mode (i.e., bus, BART, or CalTrain). Times shown are unweighted.

3.1-51, 3.1-57, 3.1-67 with this same information for Alternatives I, II, III, IV, V, Design Option V-A and Alternative VI, respectively.

- 66.244. A new survey of SFIA patrons and employees should be conducted for this DEIR by an unbiased third party, rather than BART. The results of that survey should be utilized as the baseline for projections of future transit use to the Airport....Those projections should be clearly explained within a revised DEIR, logical and easily understandable. The underlying assumptions on which the projections are based need to be made public and thoroughly discussed before they are utilized in a revised DEIR.

**Response.** It would not be appropriate or necessary to conduct new surveys of SFIA patrons and employees given that the survey information included in this DEIR/SDEIS was not developed by BART and the transit patronage information for BART was conducted by MTC, an agency separate from BART. Please refer to Response 66.239 for revisions to Table 3.1-2, SFIA Airline Passenger and Employee Access Modes, in the DEIR/Technical Appendix.

- 66.245. In the first round of DEIR publication, demand for parking at the Tanforan Station was projected to be in the vicinity of 500 vehicles, with a proposed parking garage of 650 spaces....If demand is for 500 spaces why isn't the garage also projected for 500 spaces? Is demand really 650 spaces? Does BART really know?

**Response.** Estimates of the number of parking spaces required at each BART station were derived from the MTC traffic model and refined by employing a sub-area traffic model of central and northern San Mateo County developed for this study. This model used MTC regional BART patronage projections to derive the number of persons driving to each existing and future BART station. Parking demand would be highest in 2010 compared to 1998 and 2000; therefore the impact analysis and required mitigation measures were determined for 2010. BART station parking lots were designed for an average day plus a 10 to 20 percent reserve for days that exceeded the average.

Parking demand at the Tanforan station would vary by alternative because of station design features and extension alignment assumptions. The 1992 AA/DEIS/DEIR identified a parking demand of 500 spaces based on the Tanforan station design at that time. Please refer to Response 14.25 for a discussion on provision of more parking spaces than the forecast parking demand.

- 66.246. Table 3.1-104 [of the DEIR/Technical Appendix] indicates that parking demand has been substantially revised upward to approximately 800 spaces, with a proposed garage of 1000 parking spaces for BART use. Again, if demand is clearly for 800 spaces, then why is a 1,000 space garage proposed?

**Response.** BART station parking lots were designed for an average day plus a 10 to 20 percent reserve for days that exceeded the average. Please also refer to Response 66.245.

- 66.247. [The] 1,275-space parking facility [proposed in the Tanforan BART Concept Plan] will also be inadequate for the parking demand. Assuming 875 spaces as the base amount. (BART projections, plus police facility demand) the following three conditions will contribute additional demand: 1. The substantial parking deficit at the San Francisco International Airport will add at least 400 spaces to the parking demand. 2. Additional diversion, above that projected in the DEIR, from the Colma BART station is likely to occur. 3. Severe traffic congestion on Route 101, associated with the end-of-line BART station as well as the Airport, is likely to divert BART patrons to Route 280, and the Tanforan BART Station.

**Response.** Air passengers traveling to the SFIA will not be permitted to park at BART stations. Please refer to Response 10.10 for a discussion of air passenger parking. Parking demand at the Colma Station is a result of local traffic from the surrounding communities, including Pacifica and other local towns along Highway 1 and does not include travelers from along the I-280 or Highway 101 corridors south of Colma. Traffic on I-280 destined for a BART station was forecast to travel to either the stations in Millbrae or San Bruno under Alternative VI. Parking demand may or may not exceed the estimates developed in this study, but just in case, 10 to 20 percent extra parking spaces are proposed to be built at each BART station.

Please refer to Response 10.25 for a discussion of traffic diversion from the end-of-the-line station to the Tanforan BART Station.

- 66.248. The inadequacy of traffic and parking demand information in relation to the San Francisco International Airport, as presented on pages 3.1-2 - 3.1-5 within the DEIR, hampers thorough assessment of the transportation impacts created by SFIA. While we are informed of the capacity of existing parking facilities, and passenger and employee modal split and county of origin data, the DEIR does not inform the reader about the existing demand. In other words, we do not know what percentage of existing parking is utilized, or if there is excess demand at this time, or what utilization is during the work day or during BART hours. Finally, what is the overlap of employee and air passenger traffic and parking demand?

**Response.** Page 144 of Volume I of the SFIA Master Plan FEIR (May 1992) states, "The total parking demand for air passenger and employees is about 23,900 spaces, with about 14,400 (or 60 percent) needed by air passengers and about 9,500 (or 40 percent) needed by SFIA employees. The remaining parking demand results mainly from rental car storage and taxi parking." This information pertains to the year 1991. According to Table 16, Existing Parking Supply and Demand, in the same document, the total supply of parking spaces for SFIA in 1991 was 30,729 spaces, or 6,821 spaces from the demand. This supply includes 5,170 parking spaces off SFIA property, privately operated. The Master Plan FEIR further states that 78 percent of the short-term parking in 1986 was occupied during peak periods (which occur on Fridays at 8:00 P.M.), and that 73 percent of the long-term parking was occupied during peak periods on Sundays at 4:00 P.M. According to Table 16, employees' spaces were occupied, on average, about 73 percent in 1991.

Parking demand at airport parking facilities (such as the short-and long-term parking lots) were not addressed because there would be no significant impact to these facilities cause by the BART extension. In fact, the SFIA Master Plan proposes a connection to a regional transit system to relieve airport parking problems forecast for the future. It would be fair to assume demand for parking at these facilities would be less, proportional to the reduction in auto trips to SFIA as shown in Table 3.1-8. Please refer also to Response 66.249 for further discussion.

- 66.249. It is difficult to accurately predict what percentage of SFIA employees and patrons will use the Tanforan BART parking facility; the percentage will certainly increase over time, as drivers discover its availability. It is not unreasonable to assume, I believe, that 10 percent of the SFIA deficit will emigrate to Tanforan....In order to accurately assess this situation, the DEIR needs to provide expanded information on existing parking demand, as well as provable forecasts for the target years of 1993, 1998 and 2010. The impacts of increasing traffic congestion, as well as other additional transit facilities, also need to be accurately assessed. And, what is the breakdown of employee parking deficit, versus air passenger parking?

**Response.** The Federal Transit Administration prohibits transit stations for which it has provided capital funding to construct parking for air passengers; therefore, air passengers accessing

the Tanforan Station by auto are not included in the analysis. Please refer to Response 10.10 for further discussion of the potential for air passengers to park at the BART extension stations and the strategies to prevent such parking from occurring. Revised Table B-40, Alternative VI BART Station Entries and Exits, contains the number of daily volumes by access mode and trip purpose to each of the BART extension stations plus Daly City and Colma Stations. The number of daily work trips by auto to the Tanforan Station is estimated to be 3,163 and daily non-work trips by auto to this station would be 382. These trips include kiss-and-ride trips in addition to the park-and-ride trips. The methodology and factors used to convert these daily auto access trips to parking demand are provided in the Transportation Technical Report on pages 48 and 49.

Please refer to Response 66.250 regarding mitigation measures designed to prevent air passenger parking at BART stations.

66.250. The Mitigation Measures (6.1 and 6.2, page 3.1-169) proposed to prevent SFIA employees and patrons from using the Tanforan BART parking are ineffectual, and an invitation to litigation. How can BART penalize people for using its system? How can you differentiate between an air passenger or employee from San Francisco and a local one, from San Bruno? How can you justify charging more for a one-station trip than at other points throughout the system?

**Response.** Mitigation Measure 6.1 on page 3.1-169 of the DEIR/Technical Appendix states that validated parking would be instituted at BART extension stations. This measure would limit parking to BART patrons for a 24-hour period. This measure could not penalize BART users. Mitigation Measure 6.2 on page 3.1-169 of the DEIR/Technical Appendix states that pricing surcharges and other measures would be developed to discourage SFIA passengers from parking at BART stations. Such mitigation measures include charging a surcharge to persons who enter and immediately leave a station to prevent such persons from entering the station solely to obtain validated parking. These mitigation measures would be designed to penalize individuals trying to circumvent the validated parking restrictions and would not penalize the BART user. Mitigation Measure 6.2 also states that if it were determined that SFIA passengers were parking at stations near the airport to avoid airport parking charges that a surcharge would be placed on short trips, or an equivalent mitigation would be implemented. BART is investigating a parking validation and ticketing system that would apply such a surcharge only to persons who park and ride between a BART extension station and the airport. This system would not penalize individuals who access one of these stations by transit, walk, bicycle or are dropped off. Please refer also to Response 10.10 for additional information on this topic.

66.251. By what standards are 78 percent of Colma's projected drivers expected to continue to journey to Colma, when those drivers northbound on Route 280 can more easily access the Tanforan BART station, via 380? If the retention rate at Colma is a more reasonable 70 percent, rather than 78 percent, that would add an additional 240 space requirement to the parking facility.

**Response.** The retention rate for patrons at Colma after BART has been extended to SFIA has been carefully evaluated. The reason this rate is high is because of the large number of BART patrons in Daly City (the largest city in San Mateo County) and in Pacifica. Pacifica patrons, although arriving from the south, arrive at I-280 via Highway 1 and the nearest station for these people is the Colma Station. The initial number of persons requiring parking at a BART station was estimated by the MTC model considering zone-by-zone accessibility. The traffic subarea model further refined this estimate by considering traffic conditions and travel times to allocate BART patrons by station. The results shown for Colma do not include any auto access trips from locations south of the Hickey Station. The values contained in the report represent the findings of this analysis and are believed to be accurate.

- 66.252. How do the models utilized for this DEIR reassign traffic, given LOS F on Route 101? Are the models realistically constructed, so that diversion to other routes due to congestion on 101, is reasonably assumed?

**Response.** The trip assignment step in the sub-area traffic model did account for traffic congestion, including the congested conditions on segments on Highway 101. The model assigned numerous vehicle trips to alternative routes to Highway 101 in the vicinity of SFIA due to the low level of service on this freeway. Review of the model assignments for the congested section of Highway 101 south of SFIA revealed that diversion of traffic did occur, primarily to parallel arterials. For further discussion of traffic assignment on Highway 101 please refer to Response 10.25.

- 66.253. In addition to the loss of [326] parking [spaces], the key intersection of San Mateo Avenue and Huntington Avenue will be disrupted as well....Mitigation Measure 7.1, on page 3.13-39 [of the DEIR/Technical Appendix], proposes decking half the intersection, and the commentary on page 3.13-48 states "Implementation Measure 7.1...(would) apply to this alternative and would reduce this impact to an insignificant level." This is not true. Reduction of San Mateo Avenue's lane capacity at this intersection by one-half will reduce the LOS to level F, which is a significant impact. In addition, the shifting of Huntington Avenue to its westernmost 20 feet will exaggerate the off-line nature of Huntington.

**Response.** Please refer to Response 17.69 for a discussion of replacement parking during construction of the BART alignment. The discussion of mitigation measures on page 3.13-39 of the DEIR/Technical Appendix states that the proposed mitigation measure would reduce the impact, although the impact would remain significant and unavoidable. Mitigation Measure 7.1 which states that half the street would be decked, refers to traffic flow that would continue on the other half of the street while construction of the deck occurs. The reverse would occur with the other half of the street, which would be decked until both sides of the street have decks. Once this occurs, all lanes of traffic would be reopened. This construction activity would reduce traffic capacity on San Mateo Avenue for approximately two to four months, depending on the extent of utility relocation required.

- 66.254. There would be substantial and continuous heavy, five-axle haul truck traffic utilizing San Bruno and San Mateo Avenues, interfering with the access of the San Bruno downtown district. Once again, the DEIR does not quantify the magnitude of this traffic impact.

**Response.** Tables 3.13-4 through 3.13-10, Construction Quantities, in the DEIR/Technical Appendix includes the number of trucks under each alternative considered. Construction-related truck traffic is quantified on a daily basis on page 3.13-19 under Impact 1 in the FRDEIR/S#2DEIS. During excavation, the daily number of trucks would be between 50 and 80 trucks, while during the large concrete pours the number of daily trucks would be between 80 and 120 trucks.

- 66.255. The downtown San Francisco CalTrain station should be included as a BART Alternative...With downtown CalTrain access properly factored into the calculations for...Table [3.1-6 of the DEIR/Technical Appendix]....it may well be that Alternative II (TSM) will deliver essentially the same number of transit patrons to SFIA at a considerably lower cost.

**Response.** Please refer to Response 11.6 for a discussion of the transportation-related impacts of the BART extension with the CalTrain downtown extension. Also, please refer to Response 54.4 for a discussion of linked transit trips under the TSM Alternative with and without the CalTrain

downtown extension, as well as with the Base Case Alternative with and without the CalTrain downtown extension.

- 66.256. CalTrain trips from the San Francisco Financial District to the San Francisco International Airport will be approximately twice as fast as BART from Downtown to SFIA (23 vs. 46 minutes; telephone conversation with James Haas, attorney. March 3, 1995). These time and distance advantages should serve as positive incentives for CalTrain use.

**Response.** According to the current CalTrain schedule, service between Millbrae and the Fourth/Townsend terminus takes 29 minutes on a local train and 25 minutes on an express train during the A.M. peak period. The scheduled travel time between Civic Center in San Francisco and the Millbrae Avenue Station would be 27.5 minutes under Alternative VI and 26 minutes under the Alternative VI Aerial Design Option. The travel time from the Civic Center BART station and the Montgomery Street BART station would add another three minutes to these travel times. Travel time estimates from the corner of Montgomery and Market Streets to the SFIA Terminals would be 42 minutes under Alternative VI and 46 minutes under CalTrain with a new terminus at Beale and Market Streets. Montgomery and Market Street is the center of commuter travel to downtown San Francisco. Moving the origin point to favor CalTrain at the proposed terminus of Beale and Market Streets, the BART travel time would increase to 43 minutes and the CalTrain travel time would decrease to 38 minutes.

- 66.257. In the DEIR's lack of attention to SFIA employees and air passengers, it has failed to properly examine the potential for CalTrain to carry patrons, especially employees, northerly to the Airport.

**Response.** The DEIR/Technical Appendix devotes considerable attention to issues concerning SFIA employees and air passengers, as evidenced by Table 3.1-15, Proposed Project Daily Trips by Mode to the San Francisco International Airport, and Tables 3.1-22, 3.1-28, 3.1-35, 3.1-43, 3.1-51, 3.1-57, 3.1-67 with this same information for Alternatives I, II, III, IV, V, Design Option V-A, and Alternative VI, respectively. These tables in the Analysis by Alternative subsection of the Transit Section in the Transportation Chapter of the DEIR/Technical Appendix separate the information on daily trips by mode to the SFIA according to air passengers and work, plus others. Under any of the BART build alternatives, the SFIA employees are provided with significant transit service improvements to the airport.

- 66.258. Comparative criteria [including costs and convenience] from the DEIR/SDEIS may have been described in various sections of the Report; however, there isn't a comprehensive listing of how each Alternative relates to the criteria, thus facilitating comparisons among the Alternatives.

**Response.** Please refer to Response 66.212 for a discussion of the comparison of alternatives.

## 67. AZZOPARDI, PHILIP C.

- 67.1. Under alternative VI, how many houses in Millbrae would be lost and specifically which addresses in the Marino Vista area? What effect would VI have on Marino Vista area?

**Response.** The displacement in Millbrae under Alternative VI is described on page 3.2-83 of the DEIR/Technical Appendix: four houses for the widening of Hillcrest Boulevard on both sides of the right-of-way; and 202 units at Millbrae Gardens. No displacement would occur in Marino Vista.

- 67.2. I favor Alternative VI, yet I would like some answers as to how it will affect me as a homeowner.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). Please refer to Chapter 3 of the DEIR/SDEIS for a discussion of the impacts on homeowners posed by the LPA.

#### 68. BAYS, WALTER

- 68.1. In all options please consider: ample parking at the end station with easy road access (not disrupting the community); must be at least one CalTrain/BART interchange; CalTrain should be extended downtown; don't assume that all riders have no other options and will accept any inconvenience of extra transfers ...

**Response.** The commentor's concerns are noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (see Response 2.7 for a discussion of the LPA selection process). The new LPA would incorporate approximately 3,000 new parking spaces at the joint BART/CalTrain station at Millbrae Avenue. As noted in Response 2.7, implementing the LPA does not preclude further improvements to CalTrain, including extension into downtown San Francisco.

#### 69. BELKNAP, ERLYS

- 69.1. I wish BART [to] stay out of Millbrae - stop BART at Colma.

**Response.** The commentor's opposition to extending BART south of Colma is noted. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (see Response 2.7 for a discussion of the LPA selection process).

- 69.2. End BART at the airport....CalTrain...is fine.

**Response.** The commentor's general opposition to the project is noted. Please see Response 79.18 for an overview of the studies evaluating various proposals to extend BART to the Airport. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18. Based on these studies, transit improvements beyond those provided by CalTrain alone were considered. The boards have selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the selection process). As noted in Response 2.7, extension of BART to the SFIA does not preclude further improvements to CalTrain.

#### 70. BELKNAP, JONI

- 70.1. BART should stop at Colma....There is no way people are going to take BART to the airport because it won't be easy.

**Response.** The commentor's opposition to extending BART south of Colma is noted. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18. Public input regarding the merits of the various alternatives was considered by

the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (see Response 2.7 for a discussion of the LPA selection process). Please note that a dedicated right-of-way would assure reliable travel times to the airport for those taking BART.

- 70.2. I am worried about traffic and crime. Who pays for security to protect cars from theft in these massive parking lots?

**Response.** BART police handle all crimes on BART property and are signatories to the California Mutual Aid Agreement, which allows BART police to receive mutual aid from police departments along the BART system. BART's police force composition, jurisdictional responsibilities, and methods of operation are discussed in detail in the DEIR/Technical Appendix in Section 3.5, Community Services and Facilities, on pages 3.5-7 and 3.5-8. Please refer to Response 16.106 for a list of some of the measures BART intends to implement to deter crime in the parking and station facilities.

- 70.3. I think there are too many negatives and not enough positives for BART being extended.

**Response.** The commentor's general opposition to the project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (see Response 2.7 for a discussion of the LPA selection process). It should be noted that a majority of voting San Mateans do not agree with your position.

## 71. BIKE ROUTE INC.

- 71.1. I believe that there is only one option to support: a bored tunnel through the downtown district. I do not support any cut-and-cover or any equivalent of a cut-and-cover construction proposal. I cannot afford any traffic and parking disruption, or any noise and dirt pollution.

**Response.** The commentor's preference for a bored tunnel is noted. A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

## 72. BISSON-BARNES, ALICE

- 72.1. This DEIS/DEIR absolutely does not meet the five general purposes [shown on page 1-6] and should be rewritten with careful attention given to compliance therewith.

**Response.** On page 1-6 of the DEIR/Technical Appendix, as well as in the DEIR/SDEIS, it is explained that the analyses contained in the AA/DEIS/DEIR have been expanded in response to public comments, as follows:

1. The DEIR/Technical Appendix evaluates in greater detail the 1992 LPA that was selected at the conclusion of the AA/DEIS/DEIR by MTC, BART, and SamTrans. This more detailed analysis is reflected in Chapters 3 through 7 and Appendices B, C, and D of the document.
2. The DEIR/Technical Appendix updates and refines the traffic analysis for all alternatives by examining in greater detail the local circulation impacts around the proposed station areas.

Specifically, a sub-area traffic computer model was developed to provide highway and intersection turning movement projections that were not available from MTC's regional mode-choice model (see the Transportation Technical Report, December 1994 by Parsons Brinckerhoff Quade & Douglas). In addition to the 19 intersections evaluated in the AA/DEIS/DEIR, another 73 intersections identified by local jurisdictions and Caltrans were also analyzed for a total of 92 intersections. These intersections were evaluated for the years 1993, 1998, and 2010 for both the A.M. and P.M. peak periods and the year 2000 for air quality. This resulted in over 4,000 intersection and/or highway level-of-service calculation sheets.

3. The DEIR/Technical Appendix more accurately defines the potential loss of wetlands and potential disturbances to endangered species. A wetlands delineation report was prepared and approved by the U.S. Army Corps of Engineers for the DEIR/SDEIS. This report more accurately defines the potential loss of wetlands than does the AA/DEIR/DEIS. The 71-page Biological Resources Section (Section 3.7) of the DEIR/Technical Appendix more accurately defines potential disturbances to endangered species than does the AA/DEIS/DEIR.
4. In response to comments received on the AA/DEIS/DEIR, the DEIR/Technical Appendix more thoroughly discusses potential construction impacts of all alternatives.
5. The DEIR/Technical Appendix more accurately addresses cumulative impacts than does the AA/DEIS/DEIR, including those envisioned in the 1989 San Francisco Airport Master Plan.

#### 72.2. The DEIS/DEIR does not come close to meeting the three key reasons being advanced for the airport extension.

**Response.** The commentor is referring to pages 1-7 and 1-8 of the DEIR/SDEIS. It is assumed that the commentor is stating that the BART build alternatives presented in the DEIR/SDEIS would not meet the key reasons the airport extension is being advanced. All BART build alternatives would help to alleviate highway congestion and improve air quality, as described in Section 1.3 of the DEIR/SDEIS and further explained in the following paragraphs.

*Traffic Congestion.* An additional 59,000 vehicles per day will leave or enter the Airport with the proposed expansion between 1988 and 2006. A BART extension would reduce the number of daily vehicle trips into the San Francisco Airport by 10,000 in the year 2010. A BART extension would also reduce the number of daily vehicle trips into downtown San Francisco from the Peninsula by 7,000 in the year 2010. Projected daily vehicle miles traveled in the Bay Area by the year 2010 would be reduced by 485,000 with a BART extension compared to the No Build Alternative.

*Improve Air Quality.* The Bay Area has been redesignated as an attainment area for ozone under federal standards. The extension of BART to the Airport has been named by the Bay Area Air Quality Management District as one of the region's key transportation-related measures aimed at achieving and maintaining improved air quality standards.

*Public Mandate.* Page 1-8 of both the DEIR/SDEIS and the DEIR/Technical Appendix clearly indicates that the BART extension is an integral component of the regional rail network expansion mandated by MTC's Resolution No. 1876.

#### 72.3. More efficient vehicles and penalties for those not carpooling throughout the entire area would probably be a better overall regional solution.

**Response.** Use of more efficient automobiles is not within the control of the BART–San Francisco Airport Extension project, but various roadway and transit improvements have been analyzed including the TSM Alternative. Programs to improve ridesharing are assumed to be ongoing, although no specific enhancements are part of any of the alternatives analyzed.

- 72.4. On page 1-7 [of the Summary DEIR/SDEIS] it states “Major contributors to the (existing) congestion include travel by Peninsula workers to and from San Francisco employment centers, and travel by air passengers, airport visitors, and airport employees to and from the SFIA.”...A minor solution to some of the problem would be to prohibit SFIA employees from parking at or near the airport. Furthermore, officials could restrict vehicular traffic into the airport much like the lighting system on the Bay Bridge and at many freeway entrances.

**Response.** Any prohibition against employees parking at the airport would be under the control of SFIA, and even if implemented, would likely be only a partial solution to congestion problems. Similarly, the suggested metering system would simply displace congestion to entrances to the airport.

- 72.5. What exactly does BART use for figures to support this statement [page 1-7 of the Summary DEIR/SDEIS] concerning “highway widening?”

**Response.** Section 1.3 of the DEIR/SDEIS notes that there is limited opportunity to increase highway capacity in the corridor because of expensive right-of-way requirements and significant environmental and community obstacles. The right-of-way along Highway 101 from South San Francisco to Burlingame in the project corridor is extensively developed with shopping centers, hotels, office complexes, the SFIA, etc. Acquiring these developed properties for a major highway expansion would be relatively expensive compared to acquisition of the SPTCo San Bruno branch and SPTCo/CalTrain right-of-way. Section 1.3 of the DEIR/SDEIS notes that while BART faces environmental and community obstacles, it would largely operate within an existing rail corridor, thereby minimizing costly land acquisition and displacement caused by highway widening.

- 72.6. The population centers, in case BART missed it, have migrated westward on the peninsula. Even BART notes that many areas along the right-of-way are “generally built out, with few opportunities for intensification or redevelopment.”

**Response.** Historically, the Southern Pacific railroad line was first laid out and many of the cities in northeast San Mateo County subsequently developed around the rail lines. With the development of Highway 101 and later I-280, the population center of most of northern San Mateo County later moved westward, between Highway 101 and I-280.

Alternative VI and the Aerial Design Option LPA have the benefit of a Millbrae Avenue Station which serves both the local Millbrae/Burlingame catchment area and commuters from the south via Highway 101, while providing stations at Tanforan and Hickey between Highway 101, and I-280 near the center of mass in the cities of San Bruno and South San Francisco. The Tanforan Station, located near I-380, has the benefit of providing an alternative station for commuters from either Highway 101 or I-280. The proposed BART San Bruno branch alignment, common to all BART build alternatives, is only one of two major corridors identified in the SamTrans Century Plan. This does not mean that it would be equally feasible to run the alignment in any of these transportation corridors. In fact, each of the proposed build alternatives generally follows the existing path of the SPTCo San Bruno branch and the SPTCo/CalTrain mainline from the Colma Station to the vicinity of the SFIA. As discussed in Chapter 2 of the DEIR/Technical Appendix, these build alternatives were determined, through an extensive public process, to be the only feasible build alternatives that accomplished regional and project objectives.

When results of the 1980 Census became available, the SamTrans staff examined home-to-work travel patterns in the wake of predictions from Caltrans District 4 that freeways U.S. 101 and I-280 would reach stop-and-go levels at their confluence near the San Francisco-San Mateo County line by the end of the century. Analysis of these patterns, and the transit strategy to address them, are encompassed in the SamTrans Century Plan, adopted by the Board of Directors in 1985.

Mandated by state Senate Concurrent Resolution 74, which demanded a long-range transit blueprint for the Peninsula and recommended a joint powers authority to administer CalTrain, MTC also formulated its own recommendations for alternative rail systems. MTC and SamTrans recommendations were strikingly similar. To quote the 1985 Century Plan: the I-280 corridor can capture these riders and provide relief for impacted end-of-century freeways.

MTC formally recognized this strategy in 1988 with adoption of its Resolution No. 1876, which designated the BART extension and the CalTrain downtown extension as two of the three projects in the New Rail Transit Starts and Extensions Program for the nine-county Bay Area. Consequently, regional programming for federal capital funds is focused around the two SamTrans-sponsored projects.

- 72.7. According to Table 6-1 [of the Summary DEIR/SDEIS], right-of-way costs vary by alternative from \$97,077,000 up to \$146,147,000. Although replete with errors, Table 3.2-3 shows up to 236 units and Table 3.2-5 has up to 46 businesses being displaced by these alternatives....It is [therefore] hard to swallow [that] operating within an existing rail corridor is minimizing costly land acquisition and displacement.

**Response.** Section 1.3 of the DEIR/SDEIS notes that while BART faces environmental and community obstacles, it would largely operate within an existing rail corridor, thereby minimizing costly land acquisition and displacement caused by highway widening. The commentor is referred to Response 72.5 for discussion of an alignment in the Highway 101 corridor and Response 72.363 for a discussion of the El Camino Real corridor.

- 72.8. Saying there is a "public mandate" for this extension to the airport is an overstatement. The \$1 billion price was never revealed to the voters. What was promised though was that no homes would be taken and now BART is violating that trust.

**Response.** Please refer to Response 54.18 for a discussion of the public mandate.

- 72.9. How could anyone in their right mind publish these objectives and believe that this project meets them?

**Response.** The alternatives satisfy these goals and objectives to various extents. Please refer to Response 14.7 for a discussion of goals and objectives.

- 72.10. Traffic on Huntington Avenue, serving both downtown San Bruno and Tanforan deserves to be studied before the FEIS/FEIR is released.

**Response.** Traffic on Huntington Avenue serving both downtown San Bruno and Tanforan Shopping Center was carefully considered in the analysis of traffic impacts associated with the City of San Bruno. The intersections of Huntington Avenue with Spruce, Noor, San Bruno and San Mateo Avenues as well as Sneath Lane were analyzed under all alternatives for all analysis years.

Significant traffic impacts that involve Huntington Avenue in analysis year 1993 include the intersections of Huntington/Tanforan Driveway North and San Mateo/Huntington. The significant impacts for specific alternatives are summarized on page 3.1-105 and Table 3.1-73, Intersection Level of Service, Significantly Impacted Intersections Year 1993, in the DEIR/Technical Appendix. The traffic impacts at these same two intersections are summarized for 1998 on pages 3.1-109 and 3.1-111, and Table 3.1-75, Intersection Level of Service, Significantly Impacted Intersections Year 1998, in the DEIR/Technical Appendix. Please note that on page 3.1-109 the impact attributed to the intersection of Huntington/Tanforan Driveway South should read Huntington/Tanforan Driveway North. Traffic impacts to the intersections of Huntington/Tanforan Driveway North and San Mateo/Huntington are summarized on page 3.1-115 and Table 3.1-77, Intersection Level of Service, Significantly Impacted Intersections Year 2010, in the DEIR/Technical Appendix. The level of service for all of the intersections of Huntington Avenue with Spruce Avenue, Noor, Sneath Lane, Tanforan Driveway North, Tanforan Driveway South, Forest Lane, San Bruno Avenue, San Mateo Avenue, and Angus Avenue are in the traffic tables in Appendix C of the DEIR/Technical Appendix, including Tables C-3, Intersection Level of Service -1993, C-7, Intersection Level of Service -1998, and C-13, Intersection Level of Service -2010. Page 3.1-109, third bullet, of the DEIR/Technical Appendix is revised as follows:

- Huntington/Tanforan Driveway South North.

- 72.11. Page 2-8 [of the DEIR/Technical Appendix]. The base fare [on SamTrans] now is \$1 and express service to San Francisco starts at \$2.00.

**Response.** The text regarding SamTrans fares was prepared in the Fall of 1993. New SamTrans fare increases went into effect in February 1996. Page 2-8, line 1 of the DEIR/Technical Appendix, is revised as follows:

The base fare is ~~\$0.85~~ \$1.00; express service to San Francisco is ~~between \$1.50 and \$2.00 up to \$2.50 (February 1996 fare increase)~~, comparable to CalTrain fares.

- 72.12. Page 2-10 [of the DEIR/Technical Appendix]. What exactly is the cost difference between the baseline alternative and the LPA?...Not only must this information be clearly stated here, it must also be shown on Table 6-4 on page 6-6. That is not a negotiable inclusion for this DEIS/DEIR; it is too important.

**Response.** The cost difference between the "baseline alternative" (Base Case) and the 1992 LPA is shown in Table 6-4 of the DEIR/Technical Appendix. Alternative III (the Base Case) is estimated to cost \$876,442,000 and the 1992 LPA ("the proposed project") is estimated to cost \$1,002,370,000. The difference is \$125,928,000.

- 72.13. Page 2-10 [of the DEIR/Technical Appendix]. What is the exact contribution anticipated from each of the local cities?

**Response.** Please refer to Response 19.21 for a discussion of the financial role of the local cities in the project.

- 72.14. BART should know right up front that the homes in this area, that of this author too, vibrate whenever a car speeds down Seventh. There is already an irritating groundborne vibration and you all have yet to even decide on an alignment, much less start the construction. Any designs that include an alignment immediately behind the Seventh Avenue homes should be carefully studied

before any decision is made. When the engineering is completed the area's instability will cause extremely high mitigation values.

**Response.** In all likelihood, the comment is referring to the low-frequency vibration (i.e., rumble) induced by an automobile's exhaust, especially when the muffler is in need of repair. This has nothing to do with the local soil conditions, but is instead caused by airborne sound waves rattling the windows and other, more flexible portions of the residence. The soil in the vicinity of Seventh Street in San Bruno is similar to soil in other nearby areas. However, the selected mitigation measure will depend on the results of a soils analysis prior to project construction.

- 72.15. On page 2-11 [of the DEIR/Technical Appendix], two of the three "Typical Subway Cross Sections" are not used on this project as shown in the Designs.

**Response.** The three typical subway cross sections shown on Figure 2.2-2 (page 2-11) are used on Alternative VI and are repeated on Figure 1, Page 89, of the Design Appendix.

- 72.16. Page 2-11 [of the DEIR/Technical Appendix], correct the dimensions on the subway box and the separate subway boxes in keeping with Sections A and C respectively as shown on page 89 of the Design Appendix.

**Response.** The specific dimensions shown on Figure 2.2-2, page 2-11, of the DEIR/Technical Appendix, are meant to present a design concept only. The dimensions will be refined in accordance with further design development.

- 72.17. Page 2-12 [of the DEIR/Technical Appendix], Figure 2.2-3 has a picture of twin BART tracks while the schematic beneath it shows a three-track scenario.

**Response.** Figure 2.2-3 of the DEIR/Technical Appendix, the picture of the BART train "at-grade running" (two tracks) is not meant to be a representation of the schematic drawing of at-grade tracks (three) just below it. These figures merely illustrate at-grade track configurations.

- 72.18. At the top of page 2-17 [of the DEIR/Technical Appendix] it notes "there would be no direct pedestrian or vehicle access from San Antonio Avenue to the Airport Intermodal Station." This will be a major relief to the residents of Lomita Park now that they will not have any visiting parkers...[but] What happens to San Brunans who want to take BART to the airport?

**Response.** An element of the LPA resolutions adopted by the BART and SamTrans boards of Directors and the MTC in the spring of 1992 excluded direct pedestrian or vehicle access from San Antonio Avenue and vehicle access via Center Street to the proposed Airport BART/CalTrain/ALRS Intermodal Station west of Highway 101 and east of Lomita Park neighborhood in San Bruno. This condition would exist until such time as San Bruno desired to have access. San Bruno residents would not have direct access to the Airport Intermodal Station. Under the 1992 LPA, San Brunans could take BART from Tanforan Station and transfer to the ALRS to access the Airport.

- 72.19. Page 2-17 [of the DEIR/Technical Appendix], under Ancillary Facilities, there is no car wash described but it is shown on Figure 2.2-6.

**Response.** Page 2-17, paragraph two, sentence one of the DEIR/Technical Appendix is amended to include the car wash shown in Figure 2.2-6 as follows:

Key ancillary facilities include car washes, traction power stations, ventilation buildings, and tailtracks, and are illustrated in Figures 2.2-7 and 2.2-8.

72.20. What will be the hours of operation for the Car Wash in San Bruno?

**Response.** The BART car wash would operate around the clock. The primary use of the car wash facility would occur as trains are taken out of revenue service. The heaviest hours of car wash use would be in the mid-morning after the A.M. peak, late evening after the P.M. peak, and possibly late evening and night until 1:30 A.M. as trains are taken out of revenue service.

72.21. What will be the noise impacts from the Car Wash [in San Bruno] on the adjoining neighborhood?

**Response.** The BART car wash would be relatively quiet. There would be no air blowers for drying vehicles. The residential neighborhood is far enough away that there would be no significant noise impacts.

72.22. How many trains will be washed here [in San Bruno] on an average day?

**Response.** On an average day, approximately 20 cars, or equivalent to two 10-car trains, would be washed at the car wash facility in San Bruno. The car wash operation would be a larger version of an automobile car wash. BART has about 700 cars total and three car wash facilities. If each were used approximately the same amount of time, about 250 cars would be maintained at each car wash, or roughly 20 per day.

72.23. How much water will the Car Wash use and will this be drawn from San Bruno's precious underground wells?

**Response.** A discussion of a typical BART car wash facility's water consumption is provided in the DEIR/Technical Appendix in Section 3.5, Community Services and Facilities, on the top of page 3.5-14. The projected volume averages 700 gallons per day, which is the equivalent to the daily consumption by one to two residences. The demand would be drawn from the public water supply.

72.24. What additional BART contaminants can San Bruno expect to see introduced into the sewage system as a result of the Car Wash? Has BART discussed this potential contamination with San Bruno officials?

**Response.** The BART car wash facility would be designed to reclaim and recycle wash water. The system would provide for removal of solids using settling tanks and microfilters. Water discharging from the system would contain biodegradable detergents, and perhaps small amounts of oxalic acid, a mild cleaning compound which removes graffiti and is not listed as hazardous under any federal regulatory statute.

The cleaning compounds used by BART, wastewater discharge requirements to the sewer system, and discharge monitoring requirements, are described on page 3.11-17 of the DEIR/Technical Appendix. BART will comply with RWQCB discharge standards and adhere to the requirements of a NPDES permit in cooperation with the City of San Bruno.

72.25. What does BART feel will be the impacts [of the car wash] on San Bruno's sewer systems?

**Response.** San Bruno's current wastewater treatment capacity is described in the DEIR/Technical Appendix in Section 3.5, Community Services and Facilities, on page 3.5-7. The impacts of BART on the treatment capacity are expected to be minimal. The greatest projected demand in San Bruno, estimated conservatively at 5,000 gallons per day (of which 700 gallons per day are generated by the car wash), would occur with Alternative VI. This demand (equivalent to .005 million gallons per day) is far less than the remaining 1.5 million gallons per day of capacity.

- 72.26. What mitigation measures will BART enact to prevent the obstruction of local overland drainage patterns east of the homes in Seventh Avenue?

**Response.** For the retained cut section, a drainage ditch or underground culvert would be constructed along the edge of the retained cut section to collect overland flow and transport it to the nearest cross drainageway. During construction of the cut-and-cover segment, overland water would be collected in sumps and pumped into the nearest drainageway. After construction is completed, the topography will be returned to its original condition to assure that there is no change in overall overland flow patterns.

- 72.27. Will traction power substations pose TV interference or other electronic interferences for neighbors? If so, what exactly can be the expected impacts and what are the mitigations?

**Response.** Traction power substations are not expected to pose any interference on TV transmission or other electronic systems in the neighborhood. The existing BART system has more than 20 traction power substations and no complaints on this problem have been made to BART.

- 72.28. Will traction power substations emit dangerous electrical fields? How certain is BART of that response?

**Response.** As discussed in Section 3.11, Public Health and Safety, of the DEIR/Technical Appendix, electromagnetic field (EMF) measurements have been taken at traction power substations and on BART trains. Measurements of alternating current (AC) fields within 3 feet from the substation fence vary depending on location and instances of passing trains, and range from 0.2 to 0.8 milligauss (mG) ambient to a maximum of 88 mG during passing trains. Measurements of direct current (DC) fields within 3 feet from the substation fence also vary widely depending on location and presence of passing trains, and range from 300 to 500 mG ambient to a maximum of 4,900 mG during passing trains. Both AC EMF and DC EMF attenuate significantly with increased distance from their source.

According to information received from PG&E, these EMF levels are in the same range as those generated by household appliances. For example, fluorescent desk lamps can generate up to 4,000 mG of EMF at 1 inch from the fixture. However, this EMF rapidly attenuates and reduces to about 2 mG at 3 feet away.

Likewise, EMF generated in the traction power substations is expected to attenuate to ambient level within a short distance from the substations. In addition, BART has recently adopted modifications in its traction power substation layout and raceway designs to minimize the levels of EMF generated by the DC currents. These modified designs have been implemented on the present extensions projects under construction, and are planned to be used on the BART extension as well.

- 72.29. How much noise do these traction power substations emit and will it be constant during operating hours (5 A.M. to 1 A.M.) or intermittent?

**Response.** Traction power stations will be designed to satisfy the BART system criteria for ancillary facilities (see Table 3.9-5, on page 3.9-9 of the Summary DEIR/SDEIS). Maximum noise levels from the continuously running traction power substations will be in the 50 to 65 dBA range, but probably less where residences are greater than 50 feet away. Please refer to Response 72.255 for a discussion of noise associated with various BART ancillary facilities.

- 72.30. Table 2.2-1 [of the DEIR/Technical Appendix], will there be any more trains under Alternatives IV, V and VI since they will go a farther distance and, in two cases, will even add a fourth station stop?

**Response.** The required fleet size is determined by round-trip travel time including turnaround and layover at the terminal stations, service frequency, and train length during the peak period. Fleet requirements include an allowance of 15 percent to compensate for preventive maintenance and unscheduled repairs and modifications.

The average number of trains per day serving the San Francisco Airport Extension would be the same for Alternatives IV, V, and VI as for the 1992 LPA shown in Table 2.2-1 of the DEIR/Technical Appendix. Also as shown in Tables 3.1-10, 3.1-38, 3.1-46, and 3.1-62 of the DEIR/Technical Appendix, the incremental BART fleet vehicle requirement above the No Build Alternatives is 46 cars for the 6.4 mile 1992 LPA, and for Alternatives IV, V, and VI.

- 72.31. Table 2.2-1 [of the DEIR/Technical Appendix], average cars column --the bottom 6.0 should be 6.3; number of cars column --the 1,137 total should be 1,337.

**Response.** The two changes suggested by the commentor are correct. The average cars per train for Sunday Service in the total row should be 6.3 and the total number of cars for weekday service should be 1,337 cars in Table 2.2-1, BART Service Summary for the BART extension, in the DEIR/Technical Appendix.

Table 2.2-1 is revised and included as part of Response 72.33. below.

- 72.32. Table 2.2-1 [of the DEIR/Technical Appendix], how is it that when one divides, within a time universe,...the seated capacity by the number of cars the answers vary all over the place? One would assume (probably incorrectly?) that a BART car will have the same capacity all day. There must be something wrong with this assumption....

**Response.** The seated capacity of one BART car is 72 persons. When the number in the column "Number of Cars" is multiplied by 72, the product is the number appearing in the column "Capacities - Seated" in Table 2.2-1, BART Service Summary for the BART extension, in the DEIR/Technical Appendix.

- 72.33. Assuming the footnote assumption means capacity with standees is assumed to be 1.3 times of the assumed capacity without standees then two assumptions are realized...the capacity with standees data needs the following help. Page 2-23 [of the DEIR/Technical Appendix], in the far right column: 24,394 should be 22,651; 11,491 should be 10,670; 127,706 should be 125,143; 37,800 should be 35,100; 6,250 should be 5,803; 44,050 should be 40,903; 24,998 should be 23,212; 5,443 should be 5,054; 30,441 should be 28,267.

**Response.** The commentor is correct in the calculations provided. In some cases, a factor of 1.4 was used for the number in the column "Capacities - With Standees" rather than the factor of 1.3 stated in the footnote of Table 2.2-1, BART Service Summary for the BART extension, in the DEIR/Technical Appendix.

Table 2.2-1 is revised as shown on the following page.

- 72.34. On page 2-26 [of the DEIR/Technical Appendix], under Transit, it notes "the existing San Bruno CalTrain station would be relocated...with approximately 50 parking spaces..." A relocation of the San Bruno CalTrain station with 50 parking spaces may pose a problem, especially [since] there are currently approximately 170 spaces at the station.

**Response.** As described in the DEIR/Technical Appendix, Chapter 2, pages 2-21, 2-26, and 2-36, under Alternative II (TSM), Alternative III (Base Case), and the 1992 LPA respectively, the existing San Bruno CalTrain Station would be relocated to a new site under I-380 with approximately 50 parking spaces. The existing San Bruno CalTrain Station has 169 parking spaces with a weekday occupancy rate of 90 percent (Source: *CalTrain Parking Survey*, June 1993). Since auto access at the existing San Bruno CalTrain is greater than the auto access proposed for the relocated CalTrain Station under Alternatives II, III, and the 1992 LPA, and implementation of one of these alternatives would result in spillover parking, the text has been modified to clarify that approximately 170 parking spaces would be provided. The relocated CalTrain station facility is now shown in Volume IV of the FEIR/EIS. Page 2-26, paragraph five, sentence one, is also revised as follows:

As was described in the AA/DEIS/DEIR, the existing San Bruno CalTrain Station would be relocated to a new site under I-380 with approximately 170 parking spaces (see Figure 2.2-10). The relocated CalTrain station facility will be shown on the design appendix drawings in the final EIR/EIS.

- 72.35. Page 2-30 [of the DEIR/Technical Appendix], when did BART tell San Bruno that it was going to [add turning lanes at the intersections of El Camino Real with Sneath and San Bruno Avenues] and just where will they find the additional space for the new lanes?

**Response.** This comment makes reference to the suggested improvements to the intersection of El Camino Real and Sneath Lane that were recommended in the North San Bruno Areawide Traffic Study (1986), prepared by DKS Associates for the City of San Bruno. The traffic analysis in the DEIR/Technical Appendix indicates that this improvement is required to mitigate a significant traffic impact with the Tanforan Station. BART has stated that it will fund its fair share portion of constructing this improvement. This traffic improvement would be made by the City of San Bruno in coordination with Caltrans which maintains El Camino Real. Final designs have not been developed for this improvement.

**Table 2.2-1**  
**BART Service Summary for the**  
**BART-San Francisco Airport Extension**

Period	Number of Routes	Minimum Headway (Minutes)	Average Headway (Minutes)	Average Number of Trains/ Period	Average Cars Per Train	Number of Cars	Capacities	
							Seated	With Standees <sup>1</sup>
<b>WEEKDAY SERVICE SUMMARY</b>								
Startup								
4A.M.-6A.M.	1	20	24	5	9.3	47	3,384	4,399
A.M. Peak								
6A.M.-9:30A.M.	2	1.9	4.5	47	9.3	439	31,608	41,090
Base								
9:30A.M.-3P.M.	2	7.5	7.5	44	5.5	242	17,424	<u>24,394</u> <u>22,651</u>
P.M. Peak								
3P.M.-7P.M.	2	1.9	4.5	53	9.3	495	35,640	46,332
Night								
7P.M.-12A.M.	1	20	20	15	7.6	114	8,208	<u>11,491</u> <u>10,670</u>
TOTAL	--	--	--	164	8.2	<u>1,137</u> <u>1,337</u>	96,264	<u>127,706</u> <u>125,143</u>
<b>SATURDAY SERVICE SUMMARY</b>								
Startup/Day								
6A.M.-7P.M.	2	10	1078	4.8	375	27,000	37,800	<u>35,100</u>
Night								
7P.M.-12A.M.	1	20	2015	4.1	62	4,464	6,250	<u>5,803</u>
TOTAL	--	--	--	93	4.7	437	31,464	<u>44,050</u> <u>40,903</u>
<b>SUNDAY SERVICE SUMMARY</b>								
Day								
8A.M.-7P.M.	1	20	2033	7.5	248	17,856	24,998	<u>23,212</u>
Night								
7P.M.-12A.M.	1	20	2015	3.6	54	3,888	5,443	<u>5,054</u>
TOTAL	--	--	--	48	6.0 <u>6.3</u>	302	21,744	<u>30,441</u> <u>28,267</u>

Source: BART, 1993.

1) Assumes a 1.3 load factor.

72.36. Page 2-31 [of the DEIR/Technical Appendix], exactly what lines will come past Colma?

**Response.** As described on page 2-21 of the DEIR/Technical Appendix, the BART operating plan assumes that the Concord and Richmond Transbay routes would probably serve the BART extension stations south of Colma.

72.37. Table 2.2-1 [of the DEIR/Technical Appendix], if a Fremont train comes through every 20 minutes from Colma during the three and one half hour morning commute, isn't that 11 or 12 trains at most? Add to that another six for every other Concord train that comes to only 18, aye? Send them all back from whence they came and you have only 36 trains, not 47, aye?

**Response.** The BART operating plan used for patronage forecast purposes indicated that both the Richmond to San Francisco Airport and Concord to San Francisco routes would operate at nine-minute peak period headways. This results in a combined headway for the two routes of 4.5 minutes, or 47 trains, over the 3.5 hour peak period.

72.38. In Table 2.2-1 [of the DEIR/Technical Appendix], are the figures in this round trip or one direction?

**Response.** The BART service summary figures shown in Table 2.2-1, page 2-23 of the DEIR/Technical Appendix, are for one direction.

72.39. Page 2-40 [of the DEIR/Technical Appendix], under the city of San Bruno, the first sentence according to Figure 2 should more accurately read: "Beneath the elevated structure of I-380, the alignment begins to rise on retained fill and over a depressed Herman Street and CalTrain tracks, both of which would be lowered, it then turns East along the north side of San Bruno Avenue." There is no median now or on the drawings.

**Response.** Under Alternative IV, as shown in Figure 3, page 40 of the Design Appendix, BART/SamTrans would acquire the right-of-way on the north side of San Bruno Avenue, from Huntington Avenue to Highway 101, and widen San Bruno Avenue from two to three lanes in each direction. BART would be constructed in an aerial configuration in the median of the widened street. The text on page 2-40, paragraph four, sentence two describing the BART alignment in the median of San Bruno Avenue is correct.

72.40. Page 2-41 [of the DEIR/Technical Appendix], how many express buses from the South can we expect to see on San Bruno Avenue approaching this aerial station?

**Response.** The BART station in the City of San Bruno under Alternative IV, which is the alternative discussed on page 2-41 of the DEIR/Technical Appendix, is not the end-of-the-line station. The end-of-the-line station, the Millbrae Intermodal Station, would receive SamTrans express buses from the south. The BART station in San Bruno under Alternative IV would receive local feeder SamTrans buses.

For modeling purposes, it was assumed that the local bus routes serving the Tanforan Shopping Center would also serve the San Bruno/I-380 BART Station. As defined in a background report prepared for the AA/DEIR/SDEIS (Final Definitions of Alternatives, Task 5, Deliverable 7), these SamTrans routes include 3C, 24B, 26H, 28C, 30B, and 32P. Most of these routes would arrive via Huntington Avenue after serving the shopping center, rather than traveling on San Bruno

Avenue. However, SamTrans will ultimately make the decision as to which bus routes serve each BART station, as well as their routing.

- 72.41. Page 2-48 [of the DEIR/Technical Appendix], either the last line mentioning 1,300 spaces would be provided in a four-level structure or the drawing at Figure 4.2 is incorrect because it calls for a 1,325 car garage with parking at grade plus two levels.

**Response.** Both the text and the figure are correct. The 1,300 parking spaces at the Tanforan Station referenced on page 2-48 of the DEIR/Technical Appendix, for Alternatives IV and V, is illustrated on page 109, Figure 3 of the Design Appendix. The 1,325 car parking garage shown on Figure 4.2, page 115, of the Design Appendix, refers to parking at the San Bruno station under Alternative V.

- 72.42. It is very interesting that BART is willing to disrupt San Bruno's business district and several San Bruno residential areas with a cut-and-cover subway and then spend double the dollars per track foot to bore a tunnel 2,400 feet (two-thirds of which is actually within San Bruno) in an undeveloped area so as to get under the freeway. Are the animals and vegetation in the wetlands that much more important than the people and homes in San Bruno?

**Response.** The selection of the construction technique through downtown San Bruno, whether cut-and-cover or the San Bruno Construction Tunnel Option, will not be decided until a project is adopted by BART and SamTrans Boards of Directors.

Construction of any alternative on the sensitive species habitat west of Highway 101 requires approvals by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), and the U.S. Environmental Protection Agency (EPA) because of potential impacts to endangered species. Environmental resource agencies have noted disapproval of the 1992 LPA and other alternatives with an intermodal station west of Highway 101 due to potentially significant impacts on prime habitat for the San Francisco garter snake. Based on comment letters and informal consultation, the CDFG recommends Alternative VI as the Least Environmentally Damaging Practicable Alternative (LEDPA), since it results in the least impacts to wetlands and habitat for the San Francisco garter snake. It has subsequently been explained to the resource agencies that Alternative VI may not be feasible for cost reasons and that the Alternative VI Aerial Design Option is the new LPA. USFWS, CDFG, U.S. Army Corps of Engineers, and EPA have some authority to direct agencies to construct the LEDPA, as avoidance of impacts to endangered species and wetlands is required by these agencies as a prerequisite to obtaining permits essential for construction. As a result, USFWS could issue a "Jeopardy Opinion" if the LEDPA is not selected as the LPA. A Jeopardy Opinion would make construction on the habitat of threatened and endangered species impracticable.

- 72.43. On 2 December 1994, 32 days after the 3 November Council meeting previously mentioned, BART published a revised Summary of Alternatives. Discussing Alternative VI. The brochure states the alignment will be "in retained cut through the Tanforan BART station to San Bruno Avenue. South of San Bruno Avenue, the alignment would be in a minimum length subway through downtown San Bruno." This is not in keeping with the eventual drawings, last printed on 16 December 1994....

**Response.** The commentator is correct. In August 1993, when the Screening of Alternatives Report was prepared, funding information was available only from the 1992 AA/DEIS/DEIR and the Locally Preferred Alternative Report. Table 2.5-1, Evaluation of Proposed Alternatives Screening Criteria, refers to \$627 million (1991\$) in potentially available funding for the Alternative 3A (low cost option), identified in the Locally Preferred Alternative Report, June 1992.

Alternatives that cost more than this amount would require additional funding per the 1992 LPA Report.

Table 6-3, Committed and Uncommitted Funds Required, on page 6-5 of the DEIR/Technical Appendix represents later and more complete funding information available in January 1995, and identifies \$498 million (1996\$) as the amount of funding in place.

- 72.44. Nowhere in the DEIS/DEIR does it discuss the costs or funding for this bored tunnel through San Bruno. As we will see, the difference between cut-and-cover and bored tunnel is significant. In fact, it is a monumental \$50 million more. When talking about hundreds of millions and a billion dollar extension, \$50 million loses its impact.

**Response.** Please refer to Response 17.68 for a discussion of the costs of the bored tunnel construction option.

- 72.45. Page 2-66 [of the DEIR/Technical Appendix], in top paragraph it states "South of the existing CalTrain station, a subway relief track would branch off the mainline for storage of approximately 20 cars." Per the drawings the two relief tracks branch off the mainline approximately 250 feet north of the existing CalTrain station and will be more than 600 feet in length allowing storage for (you figure the number) cars. Question: Why don't you extend these two relief tracks just a couple more hundred feet (especially since this is a cut-and-cover segment) and then you can park two complete trains there?

**Response.** The text should be modified to clarify that subway relief tracks begin approximately 150 feet north of the San Bruno CalTrain Station platform instead of south of the existing CalTrain Station and would store up to approximately 28 cars, approximately 14 on each relief track. Page 2-66, paragraph at top of page, last sentence of the DEIR/Technical Appendix, is revised as follows:

South Approximately 150 feet north of the existing San Bruno CalTrain Station platform, a subway relief tracks would branch off of the mainline for storage of approximately ~~20~~ 28 cars.

- 72.46. Why don't you continue the cut-and-cover method for about 2,000 feet under the wetlands area and save maybe \$35,880,000.33?

**Response.** The open area west of Highway 101 contains not only wetlands but also habitat for species that are on the Federal Endangered Species Act list or are proposed for listing or are a candidate for listing. Cut-and-cover subway construction in this area would not be approved by the agencies administering these lands.

Under Alternative VI, cut-and-cover subway technique would be utilized to station 382+00 through the upland sensitive species habitat to station 382+00, west of Highway 101 (see Figure 5, page 79 of the Design Appendix). At station 382+00, the cut-and-cover subway would transition to a bored tunnel section for approximately 800 feet under the wetlands area before crossing under Highway 101 at approximately station 390+00. This 800 feet of tunneling was proposed as part of Alternative VI to avoid surface disruption to wetlands (sensitive species habitat). In addition, a Millbrae tunneling option proposed in Alternative VI would tunnel under both the upland and wetland habitat portions of the sensitive species property west of Highway 101.

- In addition, tunneling is the only acceptable construction method across operating areas of the airport.
- 72.47. On page 2-66 [of the DEIR/Technical Appendix] it briefly discusses parking for the disabled. Shouldn't this be discussed under the other alternatives too?
- Response.** Parking facilities for disabled persons will be provided to meet state and federal requirements regarding accessibility at all BART stations except at the Airport GTC and International Terminal stations where no parking is proposed. Accessible parking is identified for the various proposed BART stations on pages 2-13, 2-41, 2-48, 2-55, and 2-66 of the DEIR/Technical Appendix. Handicapped facilities will be provided at all stations to meet state and federal accessibility requirements.
- 72.48. On page 2-66 [of the DEIR/Technical Appendix], where it says the Tanforan Shopping Center parking structure "would be retrofitted," don't you mean the structure will actually be demolished and replaced?
- Response.** As proposed in Alternative VI, the existing Tanforan Shopping Center Parking Garage would be demolished and reconstructed to conform with current seismic requirements and to provide adequate clearances for bus operations below the first parking deck.
- 72.49. On page 2-69 [of the DEIR/Technical Appendix], at the top, it states that under Alternative VI, the "station differs from the design identified for the other alternatives in that 1) the station platform is further south by approximately 1,200 feet." First, several of the alternatives have San Bruno stations way down as far as below Angus. Second, assuming you meant compared to the LPA, then it is more like 600 feet. The LPA station ends approximately 210 feet south of the 300+00 mark and the Alternative VI station begins approximately 790 feet south of the same mark.

**Response.** Clarification of the distance is required. A comparison of pages 11 and 76 of the Design Appendix - Conceptual Design Drawings shows the north end of the Tanforan Station platform under Alternative VI approximately 1,200 feet farther south than the north end of the Tanforan Station platform under the 1992 LPA and Alternative III. The Tanforan Station platform under Alternative VI begins at station 307+00 while under the 1992 LPA the platform begins at station 295+00. The resulting difference between the two is 1,175 feet. All BART station platforms are 700 feet long.

- 72.50. On page 2-74 [of the DEIR/Technical Appendix], according to the drawings there are really two relief tracks and that whole story is repeated again. Additionally, it does not end at Cupid Row and there does not look as if we can find the ventilation and subway access structure located across from Cupid Row.

**Response.** The text has been modified to clarify that subway relief tracks begin approximately 150 feet north of the San Bruno CalTrain Station platform, provide storage for approximately 28 cars, end at approximately Florida Avenue and the ventilation structure, and would be located at the San Bruno CalTrain Station. Page 2-74, paragraph seven, sentences one and two are revised as follows:

Subway relief tracks for storage of 20 up to 28 vehicles would extend south of the existing from approximately 150 feet north of the San Bruno CalTrain Station; platform within the CalTrain right-of-way to approximately Cupid Row Florida Avenue. A

ventilation and subway access structure would be located ~~across from Cupid Row at the existing San Bruno CalTrain Station.~~

- 72.51. On page 2-76 [of the DEIR/Technical Appendix] the description under Tunnel Construction is incorrect because it emphasizes Euclid when really the drawings show it as I-380. In part, it should read "...tunnel portal under I-380. The tunnel construction would extend from I-380 through downtown San Bruno to north of Sylvan Avenue.

**Response.** The text has been modified to clarify that the tunnel option through San Bruno starts under I-380 rather than near Euclid Avenue. The northern segment of the Alternative VI Tunnel Construction Option through San Bruno is correctly shown in Figure 1, page 85 of the Design Appendix. Page 2-76, paragraph two, sentence four, is revised as follows:

The tunnel construction would extend from ~~Euclid Avenue under I-380~~ to north of Sylvan Avenue through downtown San Bruno.

- 72.52. Page 2-76 [of the DEIR/Technical Appendix], isn't it misleading to state that the bored tunneling "would result in minimal disruption to San Bruno business area during construction"? Those trucks hauling away the spoils during the day are sure to pass by some San Bruno businesses. Those trucks hauling away the spoils during the night are sure to pass by some San Bruno homes too.

**Response.** Trucks would have to haul excess excavated material (spoils) whether the excavation technique is cut-and-cover or bored tunnel. However, the use of a tunnel boring machine would minimize the disruption at the surface along the route of the subway compared to the cut-and-cover method. The bored tunnel portion would be between I-380 and Sylvan Avenue allowing the surface of this segment to remain undisturbed. The last sentence in paragraph three, on page 2-76 of the DEIR/Technical Appendix is replaced as follows:

This design option would result in ~~less minimal~~ disruption to San Bruno businesses during construction than the cut-and-cover method.

- 72.53. During the so-called "retrofitting" of the Tanforan parking structure how will BART compensate those merchants suffering financial losses?

**Response.** Evidence does not indicate that merchants will suffer losses as a result of retrofitting the Tanforan Shopping Center parking structure under Alternative VI. Access to the shopping center would be maintained at all times, and both temporary and permanent merchant replacement parking would be provided by BART. Under the LPA Aerial Design Option, the Tanforan parking structure will not be retrofitted.

- 72.54. During the construction phase under the other alternatives how will BART compensate those merchants suffering financial losses?

**Response.** Businesses are eligible for Relocation Assistance Benefits as established under the Uniform Relocation Assistance Act of 1970 and comparable California relocation laws. Please refer to Response 16.16 for further discussion of this topic.

- 72.55. Where exactly in the Table "universe" are these individual elements shown and what are the preliminary estimates for each?...1) development of parking facilities, 2) communications, 3) fare

collections, 4) relocation expenses, 5) land for parking facilities, relocation of displaced residents or businesses, 6) construction management, 7) BART staff costs, and 8) amount for mitigations are not there.

**Response.** Please refer to Table 6-1 on page 6-2 of the DEIR/SDEIS for the elements referred to in the comment. The cost of parking facilities is included in Station costs. Communications systems are included with Systems costs. Fare collection equipment costs are included with other Systems costs. Relocation expenses are covered in right-of-way costs. Expenses associated with land for parking facilities, and relocation of homes and businesses, are included in right-of-way costs. Construction management is included with Engineering Services. BART costs are a part of Engineering Services. Mitigation of environmental impacts is included as a line item.

- 72.56. What goes into reserves as reported on page 2-76 [of the DEIR/Technical Appendix]? How much are they and where are they shown in Table 2.3-1?

**Response.** "Contingency and Reserves" is calculated at 8 percent of all other costs. This line item is shown in Table 6-1 on page 6-2 of the Summary DEIR/SDEIS.

- 72.57. What will you do should there be a need for tremendous sums to remove hazardous materials? If need be, can you change the alternative choice?

**Response.** The Daly City turnback and Colma Station extension are built on former SPTCo right-of-way. Only minor amounts of hazardous materials have been encountered. Preliminary analysis suggests BART construction is unlikely to encounter substantial amounts of hazardous materials. BART and SamTrans are in discussions with SFIA to determine liability issues should hazardous materials be discovered during the process of constructing the extension on airport property.

- 72.58. Since "these costs are preliminary and will change based on further engineering design work," who will have to contribute the increased costs and who will be credited the decreased costs?

**Response.** Please see Response 14.93 for a discussion of the financial plan included in the DEIR/SDEIS, and Response 13.2 for a discussion of estimated capital costs.

- 72.59. Many would like to know what inflation factor BART uses.

**Response.** Generally, construction costs have been increased at three percent per year, per information from Engineering News Record. Other BART costs (personnel, power, etc.) are generally increased at five percent per year.

- 72.60. Please use one common annual dollar!!

**Response.** Although there is some confusion resulting from use of a number of different dollar-years, there is good reason for not using a single dollar-year for all figures. Conceptual cost estimates are shown in 1996 dollars because at the time of cost estimation, 1996 was believed to be the mid-point of construction. O&M costs are shown for 2010 in 1996 dollars at the request of the FTA. The FTA discussed 1991 dollars in 1991 when ISTEA (Intermodal Surface Transportation Efficiency Act) was enacted. Please see Response 72.66 for a discussion of the dollar amounts in Table 2.3-2. Revenues are shown in 1998 dollars because that is the year they are expected to be received. The left column in Table 2.4-1 should refer to 1996 dollars, not

1994 dollars. Table 6-7 does not refer to 1994 dollars; "1994" in the "Source" line defines the year the estimates were made; estimates are shown in year of collection.

- 72.61. Page 2-78 [of the DEIR/Technical Appendix], the mid-point of construction will no longer be in 1996 but rather, the transit and celestial Gods willing, in 1997.

**Response.** Conceptual cost estimates are shown, and 1996 was believed at the time to be the midpoint of construction. Updates and refinements to the schedule and capital costs figures are discussed in Chapter 6, Volume I, of this FEIR/FEIS.

- 72.62. Page 2-78 [of the DEIR/Technical Appendix], for each alternative what are the estimated costs for acquisition of track ROW, public lands, residences, businesses, churches, etc.?

**Response.** The costs shown in Table 6-1 related to right-of-way acquisition are defined at the level of conceptual cost estimates for eight alternatives/design options. It is not appropriate to provide additional information on the alternatives eliminated through preliminary engineering. For a discussion on level of detail of capital costs, see Response 13.2. For information on the right-of-way costs of the LPA, refer to the Financial Analysis, Volume I of the FEIS/FEIR.

- 72.63. Where does BART list the addresses of those units now in private hands that might be acquired?

**Response.** The BART Real Estate Department has listings of residential properties that may be acquired under the various alternatives.

- 72.64. Page 2-78 [of the DEIR/Technical Appendix], Table 2.3-1, how can you have entries for mitigation of Environmental Impacts when you have absolutely no idea how many homes on Huntington will have to be raised off their foundations under Alternative VI? Maybe this is simply for mitigation of the environment? In that case, where is the amount for mitigation of residences and businesses?

**Response.** "Mitigation of environmental impacts" refers to costs associated with mitigation of impacts to the wetlands west of Highway 101. Costs of relocation of residents and businesses are included in right-of-way acquisition, and costs of noise and vibration mitigation are included in line costs.

- 72.65. Page 2-79 [of the DEIR/Technical Appendix], Table 2.3-2...these are really 1996 dollars.

**Response.** The commentor correctly observes that the costs mentioned in the table should be expressed in terms of 1996 dollars, not 1993 dollars. On page 2-79, Table 2.3-2 of the DEIR/Technical Appendix, the table title is amended as follows:

Table 2.3-2  
Estimated Operating and Maintenance Costs in 2010  
Millions of ~~1993~~ 1996 Dollars

- 72.66. Page 2-79 [of the DEIR/Technical Appendix], Table 2.3-2, what are the operating and maintenance costs in 1995 using 1995 dollars? If these are \$215 million then using a 3 percent annual inflation factor, the no build \$247.6 million in 2010 represents a total growth of only 15 percent, right? Furthermore, the 1995 figures do not include the Dublin Station nor Colma.

**Response.** The estimated operating and maintenance costs for Alternative VI in 1995 dollars would be \$32.3 million if the extension were in operation in 1995. The O&M cost of \$35.3 million is for the four-station extension only; Colma and Dublin operations are included in the systemwide figure of \$309.1 million. All extensions are assumed to be open in the calculation of systemwide costs, as indicated by the "2010" in the title of the table.

- 72.67. Page 2-79 [of the DEIR/Technical Appendix], can we assume these are the limited operations shown on page 2-21? If so, isn't BART targeting 2 1/4 minute headways on the extension and what impact will this have on operating and maintenance costs?

**Response.** The Estimated Operating and Maintenance Costs shown on page 2-79 of the DEIR/Technical Appendix are based on the operating plan described on page 2-21 of the same document. BART and SamTrans are not proposing 2.25 minute headways from Colma to the end of San Francisco Airport extension line, as the commentator suggests. Proposed average peak-hour headways (time between trains) from Colma to the end of San Francisco Airport extension line are 4.5 minutes, and minimum peak period headways are 1.9 minutes.

A primary goal of the BART 1992 Ten Year Plan is to reduce Transbay headways from the current 3.75 minutes during peaks to 2.25 minutes to accommodate projected future passenger growth and proposed Dublin/Pleasanton Transbay service. As the operating plan describes on page 2-21 of the DEIR/Technical Appendix, it is assumed that two BART routes would serve the BART extension stations.

Per the BART-SamTrans Comprehensive Agreement, March 1990, SamTrans has "the right to prescribe in consultation with BART the level of service to each station south of the existing Daly City Station to be provided by BART within the range of service levels that BART reasonably determines is compatible with existing system operations." If BART were to provide 2.25 instead of 4.5 minute peak period weekday headways south of the Colma Station, incremental operating and maintenance costs for Alternative VI (above the No Build Alternative) would increase from \$38.5 to approximately \$62 million.

- 72.68. It is important to know precisely the operating and maintenance costs for each alternative in an out year because this information should be added into the cost per passenger mile. This is critical when the Federal Transit Authority compares figures on this extension vice other projects it will finance.

**Response.** The Federal Transit Administration does not cover operating costs of BART, although it does collect information on operating costs of various systems around the country. BART has one of the highest farebox recovery factors in the industry (approximately 48 percent), and recovery on the BART-San Francisco Airport Extension is expected to exceed this rate.

- 72.69. Page 2-81, Table 2.4-1 [of the DEIR/Technical Appendix], the number of parking spaces for Alternative VI is not 3,300 but rather should be 1,000 per the information BART presented to the San Bruno City Council on 3 November 1994. The total is wrong also.

**Response.** The commentator has correctly noted errors in the parking figures in Table 2.4-1 for Alternative VI. The figure for Tanforan should be "1,000," not "3,300" and the total should be "5,337," not "7,337." The correct figures were used in the analysis in the document.

Alternative VI

- Hickey - 1,337

- Tanforan - ~~3,300~~ 1000
  - Airport International - 0
  - Millbrae Ave. - 3,000
- Total: ~~7,337~~ 5,337*

72.70. Page 2-81, Table 2.4-1 [of the DEIR/Technical Appendix]. The 1994 dollars for Capital Costs are really 1996 dollars. That should still be in 1997 dollars because that is the new mid-point of construction.

**Response.** The table should say "1996 dollars." However, "dollars at mid-point of construction" is not necessarily the same as "1996 dollars." "Costs in 1996 dollars" are calculated by inflating the entire project cost from current dollars to 1996 dollars at a fixed, assumed rate of inflation. "Costs at mid-point of construction" requires inflating each element's costs to its own mid-point of completion. For instance, costs for purchase of right-of-way, completed in, say, the first two years of the project, would be inflated for one year, not to 1996. Page 2-81, Table 2.4-1, first column, seventh row, is revised to show capital and operations and maintenance costs in 1996 dollars.

Capital Costs  
(BART only-  
thousands ~~1994~~ 1996 \$)

Cost estimates will be revised as preliminary engineering progresses and construction schedules are defined more clearly. The cost-effectiveness index was calculated for the alternatives reviewed in the AA/DEIS/DEIR in that document. Please refer to Table 6-22 of the AA/DEIS/DEIR.

72.71. Page 2-104 [of the DEIR/Technical Appendix], what is meant by the statement "BART alternatives with the airport station west of Highway 101 have better federal cost-effectiveness ratings compared to a station under the SFIA garage?" How could BART know that?

**Response.** Among the alternatives reviewed in the AA/DEIR/DEIS completed by MTC in 1992, the alternatives with a station west of Highway 101 showed superior cost-effectiveness indices (CEI) than those with a station located under the SFIA parking garage. Alternatives 3A, 3B, 5A and 5B all proposed a station located west of Highway 101, and the range of CEI was reported at \$21.51 to \$30.96. Alternatives 4A, 4B, 6A, and 6B proposed a station under the airport parking garage, and had CEI of between \$37.06 and \$51.20.

72.72. Page 2-107 [of the DEIR/Technical Appendix], shouldn't the funding shortage (capital cost over \$627 million) in 1991\$ resemble something like [Table] 6-3?

**Response.** The "funding shortage (capital costs over \$627 million)" seen on page 2-107 (Table 2.5-1) of the DEIR/Technical Appendix was a comparative screening criterion, as noted in the text. All potential alternatives reviewed were compared against \$627 million, the estimated available funding for the Base Case in 1991 dollars. The \$627 million figure is stated to be "available funding," and does not represent a committed or allocated amount. The \$301 million seen in Table 6-3 is committed New Starts funds, the most firmly committed portion of the funding plan in the table.

72.73. SFIA is building more parking for employees and passengers. BART wants to build garages at each of its new stations....For two transit agencies, one in the air and one on the rails, you both seem to be building beaucoup facilities for transit on the roads, the same people you want to get off the road? Unconscionable!

**Response.** The choice of access mode to the BART extension stations was determined by MTC's mode choice model, the federally approved model for making these estimates. In many instances, individual vehicle trips would be shorter because they were to a BART extension station rather than to the driver's final destination. In other cases, individuals who previously drove a vehicle would switch to using transit, walking, or bicycling to a BART station. The traffic impacts resulting from individuals who change routes to access a BART extension station, or switch to driving to a BART station instead of riding on transit, were analyzed in the DEIR/SDEIS.

Please also refer to Response 50.2 for a discussion of the supply of parking for BART patrons.

- 72.74. On Table B-37 [of the DEIR/Technical Appendix], for Alternative VI, in 2010, 6,700 airport workers, out of 50,700, (notice the four year growth from 42,400) in airport employees will take public transit to work. That means 44,000 in cars are going to have to park on top of one another. Also, that means only 13 percent will take advantage of transit, even with BART. Why are we being asked to spend \$1.25 billion to help these wheel huggers when they aren't going to use it advantageously anyway?

**Response.** Construction of the BART extension would offer an alternative to airport employees driving to work and parking on the airport. Airport policy and parking supply would determine if these employees would "have to park on top of one another." Moreover, difficulties at SFIA would encourage, not discourage, BART and CalTrain ridership by airport employees, among others. The DEIR/Technical Appendix on page I-6 identifies the three key reasons for the project as: alleviation of highway congestion, improvement of air quality, and carrying out the public mandate of the San Mateo County voters.

- 72.75. It is time for a new airport employee survey. It has been almost 12 years since the last survey was taken and we know, for a fact that much has transpired...

**Response.** Please refer to Response 66.244 for a discussion of surveys of SFIA employees.

- 72.76. On page 3.1-4 [of the DEIR/Technical Appendix], SamTrans Route 2X has made only one trip from Pacifica in the morning and one return trip to Pacifica in the afternoon for years now.

**Response.** The commentor correctly notes that the text should be modified to clarify that the SamTrans Route 2X makes one trip from Pacifica to the United Airlines Maintenance Base in the morning, and one trip from the United Airlines Maintenance Base to Pacifica in the afternoon. Page 3.1-4, carryover paragraph, first complete sentence, is revised as follows:

SamTrans Route 2X offers ~~two~~ one trips from the Pacifica area to the United Airlines Maintenance Base in the morning and one trip from the United Airlines Maintenance Base to Pacifica in the afternoon.

- 72.77. Do the 51.3 million passengers shown on page 3.1-2 [of the DEIR/Technical Appendix] include both arriving and departing persons?

**Response.** This number is from the SFIA Master Plan DEIR and does refer to both arriving and departing persons. Footnote b to Table 1, SFIA Aviation Activity Comparison, on page 24 of the SFIA FEIR (May 28, 1992), states "'Annual Passengers' is sum of enplanements and deplanements, including passenger transfers but excluding 'through' passengers (continuing on the same flight)."

72.78. On page 3.1-3 [of the DEIR/Technical Appendix], Table 3.1-1, what is the difference between "resident airline passengers" and "non-resident passengers?"

**Response.** Resident airline passengers are individuals whose homes are in the San Francisco Bay Area, while non-resident airline passengers are individuals whose homes are outside of the Bay Area.

72.79. On page 3.1-3 [of the DEIR/Technical Appendix], Table 3.1-1, how many passengers are from the bay area and how many (51.3 million minus locals) are non-resident?

**Response.** Using information from MTC's Air Passenger Survey 1990, the same source used for Table 3.1-1, SFIA Airline Passenger and Employment Origins, of the DEIR/Technical Appendix, BART estimates that 60.5 percent of air parties were non-resident in 1990. This estimate was calculated as a weighted average from Tables 2.4 and 2.5 in MTC's Air Passenger Survey 1990, although Table 2.5, Residence Status of Air Parties by County of Origin, is not specific to SFIA, but instead includes all other regional airports.

72.80. On page 3.1-8 [of the DEIR/Technical Appendix], Figure 3.1-1 is outdated because it does not show, for example, the 3X and 17F that both stop at the airport.

**Response.** Figure 3.1-1 on page 3.1-8 is from the AA/DEIS/DEIR, and represents SamTrans bus routes in 1992. The commenter is correct that there have been several route changes to SamTrans bus service since that time, including routes 3X and 17F now serving the Airport. However, the great majority of SamTrans routes remain the same. Copies of the current SamTrans Bus Route Map are available from SamTrans offices at 1250 San Carlos Avenue, San Carlos, California.

72.81. Not only is the suspicious MTC modeling questionable but on page 3.1-11 it states that its forecasts are based on Association of Bay Area Governments (ABAG) projections of regional growth. ABAG's projections leave much to be desired. Add to that "Because the (MTC) model is regional in nature, it is not sensitive to small differences in alternatives, nor other subjective factors...which may affect actual patronage in a 'real world' case." The Achilles heel of this study is the assumption that the suspicious MTC model is anywhere near accurate. Compound that with the dubious information provided by ABAG and you have a compounded confusion on top of confusion.

**Response.** MTC's travel demand model, which uses projections from ABAG, is the regional model approved by FTA, and is to be used in forecasting transportation-related impacts associated with federally funded transit projects.

72.82. On page 3.1-11 [of the DEIR/Technical Appendix], how were the 1993 (baseline) and 1998 (year of opening) data derived from the MTC travel demand?

**Response.** MTC performed model runs for the years 1990 and 2010. The results for the analysis years 1993 and 1998 were interpolated. The process used to make these adjustments is described in Sections 2.1.2, Mode-Choice Travel Projections, and 2.1.3, Adjustments to the MTC Model Results, on pages 7 to 16 of the Transportation Technical Report.

72.83. On page 3.1-13 [of the DEIR/Technical Appendix], the statement that there will be "29,000 boardings for the BART-San Francisco Airport Extension" is seriously misleading on two counts. First, these boarding figures must be divided in half because they include return trips

daily by the same patrons. Second, per note 2 on page 3.1-14, they are "patrons entering transit vehicles from all sources."

**Response.** Boardings are defined in footnote 2 to Table 3.1-4, Regional Transit Boardings, on page 3.1-14 of the DEIR/Technical Appendix as "the total number of patrons entering transit vehicles from all sources, including transfers, auto, and walk access." The result would no longer refer to boardings if the number were divided in half. If the second reference is to "linked transit trips," which do not count transfers between transit systems in estimating total transit trips, then Table 3.1-3, Regional Transit Person Trips (Linked Trips) of the Summary DEIR/SDEIS presents this information. Note that information on linked transit person trips is also included in the DEIR/Technical Appendix for each individual alternative. For example, Table 3.1-66, Alternative VI Regional Transit Person Trips (Linked Trips) Daily Volumes by Trip Purpose and Year, includes this information for the new LPA.

- 72.84. On page 3.1-14 [of the DEIR/Technical Appendix], note 1 defines the nine-county area to include Marin, Sonoma, Napa and Solano counties among others. "Transit includes four major public operators BART, CalTrain, SamTrans, Muni and private bus carriers to the Airport." These figures for the region then do not include patronage on Golden Gate Transit, AC in Oakland and whatever is used up in Santa Rosa and Fairfield? Maybe that is why the figures are so low?

**Response.** The regional transit ridership volumes referred to in Table 3.1-4, Regional Transit Boardings, on page 3.1-14 of the DEIR/Technical Appendix include ridership for every transit operator in the Bay Area. However, this project proposes to improve transit service only in northern San Mateo County, so virtually all of the increases indicated in Table 3.1-4 involve those operators listed - primarily BART, CalTrain, SamTrans, Muni (to a lesser extent), and various services to SFIA.

- 72.85. Table 3.1-6 [of the DEIR/Technical Appendix] is a bear to understand. Taking just the top third, "to SFIA," it sounds as if there will be 16,100 daily person trips to the airport in 2010 (up from 12,200 in 1993) even if there is No Build. If one believes that 28.5 percent of 29.9 million passengers annually took public transit that would average out to 22,644 (28.5 percent of 29.9 million divided by 365 days) per day. In other words, the number of passengers utilizing transit daily to get to the airport has gone from 22,644 in 1990 to 12,200 in 1993 and is expected to climb to 16,100 fifteen years from now.

**Response.** Revised information on SFIA airline passenger and employee access modes indicates that use of scheduled transit by air passengers was 3.3 percent in 1990, and by employees was 3.6 percent in 1991. Table 3.1-6 represents transit travel to SFIA from counties served by BART, rather than from all counties in the Bay Area. The following footnote is added to Table 3.1-6 for clarity:

- 3) The travel volumes shown are only from the five counties most affected by the project alternatives. These counties are San Francisco, Alameda, Contra Costa, Santa Clara, and San Mateo.

The use of 28.5 percent transit from Table 3.1-2, SFIA Airline Passenger and Employee Access Modes, in the DEIR/Technical Appendix is not directly applicable to Table 3.1-6 because definition of "transit" differs, and one table is based on survey data while the other reflects model results. The annual numbers cited in the comment cannot be simply divided by 365 days per year to obtain an average day. The airport has weekend and holiday peaks that are different from the average weekday commute peak, and this study only evaluates the average weekday. Transit

volumes for air passengers to SFIA were carefully analyzed by MTC. MTC projections are based on sound data and modeling techniques.

- 72.86. On page 3.1-17 [of the DEIR/Technical Appendix], Table 3.1-6, to downtown San Francisco there is a 7,700 difference in 2010 between Alternative VI (53,300) and No Build (45,600). If you divide the delta by two does that mean Alternative VI can be expected to generate its fair share of 3,850 new riders to public transit throughout the nine-county area?

**Response.** The commentor is correct in dividing the value indicated (7,700 trips) by two to estimate the number of new transit riders, because the volumes displayed in Table 3.1-6, Transit Utilization by Geographic Area, are one-way person trips. However, this value is only for the increased transit ridership from Peninsula residents to downtown San Francisco. Extending BART to SFIA would increase transit trips from other portions of the Bay Area to northern San Mateo as well as to SFIA. Table 3.1-66, Alternative VI Regional Transit Person Trips (Linked Trips) in the DEIR/Technical Appendix, indicates that 23,400 new transit person trips would occur under Alternative VI in 2010. These linked trips may involve the use of one or more transit systems, but the total trip is counted as one transit trip.

- 72.87. On page 3.1-18 [of the DEIR/Technical Appendix], Table 3.1-7, how many of these impacts are negative vice positive?

**Response.** All of these transfers are considered positive transfer opportunities that would connect two different transit systems that were not possible without a BART build alternative or the TSM Alternative. The only negative among these transfer opportunities is the second transfer from BART to the ALRS required under Alternative VI for CalTrain riders traveling to the SFIA. This negative impact is limited to approximately 10 percent of the CalTrain riders because the others would walk to airport destinations. Please refer to Response 66.111 for further discussion of double transfer for CalTrain riders traveling to or from SFIA.

- 72.88. On page 3.1-18 [of the DEIR/Technical Appendix], Table 3.1-7, the asterisk states that CalTrain-ALRS requires a double transfer via BART. So then, how much of that 8,000 figure for Alternative VI in 2010 is real? One wonders how useful Table 3.1-7 is to decision makers. If we only knew how many of these transfers were positive, if we only knew how many accounted for individual persons, if we only knew how many were that double transfer, then maybe we would know something of value.

**Response.** Please refer to Response 66.111 for a discussion on the need for CalTrain riders to transfer twice, once to BART and then to the ALRS.

- 72.89. How many of these transfers [between BART and CalTrain] are by airport employees?

**Response.** Approximately 2,100 SFIA employees transfer between CalTrain and BART to access the airport under Alternative VI, the alternative referred to in comment 72.89. Table 3.1-67, Alternative VI Daily Trips by Mode to the SFIA, in the DEIR/Technical Appendix contains this estimate of airport employees who ride CalTrain to access SFIA. These individuals would transfer to BART to access the airport under Alternative VI. While the category in Table 3.1-67 is listed as "work and other" very few of these trips are in the other category which includes shopping, social and recreational trips because few of these type of trips are made to the airport.

- 72.90. On page 3.1-19 [of the DEIR/Technical Appendix], Table 3.1-8, how does this relate to Table 3.1-6? The following pertain to the airport and are both for Alternative VI and the year 2010. There will be 24,900 daily person trips by transit (Table 3.1-6) versus 33,600 (Table 3.1-8).

**Response.** Daily person transit trips to SFIA in Table 3.1-6, Transit Utilization Geographic Area, only includes San Francisco, Alameda, Contra Costa, Santa Clara, and San Mateo Counties. The intent of this table is to provide the increase in transit volumes to SFIA for those counties that would be most affected by the BART extension. Therefore, Marin, Sonoma, Solano, and Napa Counties' transit volumes to SFIA are not shown in Table 3.1-6. Table 3.1-8 includes transit ridership to SFIA from all nine counties and is therefore a larger number.

- 72.91. On page 3.1-19 [of the DEIR/Technical Appendix], Table 3.1-8, at note 3, it says that the bus figures include SamTrans and Muni. Does Muni currently run to the airport?

**Response.** Muni does not currently provide bus service to SFIA and is not assumed to do so in the future. The reference to Muni in Table 3.1-8, Daily Trips by Mode to SFIA, in the DEIR/Technical Appendix under footnote 3 is incorrect and is revised as shown below:

- 3) Bus includes shuttle buses as well as buses operated by SamTrans ~~and Muni~~.

The bus ridership does include rides on services such as the SFO Airporter, a privately-operated San Francisco-based bus service, and various limousines provided by hotels.

- 72.92. On page 3.1-20 [of the DEIR/Technical Appendix], Table 3.1-9 has BART daily patronage by station and, of course, all these figures should be halved because, as noted in note 1, patronage is defined as the number of entrances and exits at a particular station....[I]f there is No Build, by 2010, patronage will climb by only 1,450 new BART riders in the preceding twelve years. Something is wrong, again, either with that suspicious MTC model or we are not going to see much growth. Of course, the latter is not true because, with all that new airport traffic, there is going to have to be some growth.

**Response.** The definition of patronage as the number of entrances and exits at a particular station is correct in the comment, but Table 3.1-9 cannot be used to obtain the increase in BART patronage under the No Build Alternative between 1998 and 2010 because it only includes patronage at the Daly City and Colma BART Stations. Table 3.1-5, Regional Daily Transit Operator Boardings, in the DEIR/Technical Appendix, presents boardings for the entire BART system. BART boardings are forecast to increase by 38,100 from 1998 to 2010 under the No Build Alternative due to the changes in socioeconomic forecasts, i.e., employment and household growth and resulting increase in transit trips.

- 72.93. On page 3.1-21 [of the DEIR/Technical Appendix], at the bottom, it states "transit service levels were held constant between 1993 and 2010 in the MTC model." Excuse me! Transit service will be held constant for the next seventeen years?...Once again, the suspicious MTC model is programmed to use a mega improbable. Well, at least to most transit users, it is improbable.

**Response.** The sentence just prior to the one cited in the comment states that service increases are projected for all operators. These higher transit service levels were assumed for transit operators in 1993 as well as in 1998, and 2010, i.e., service was increased beyond what was provided in 1993, to assure that the 1993, 1998, and 2010 patronage estimates used comparable assumptions for transit services. Otherwise, increased transit patronage from one analysis year to

another would have resulted from changing transit level assumptions as well as from changing socioeconomic estimates.

72.94. Why doesn't the DEIS/DEIR [Technical Appendix] include a table comparing linked trips for all the alternatives? The Summary of DEIS/DEIR included one on page 3.1-12.

**Response.** Information on linked transit person trips are included in the DEIR/Technical Appendix for each individual alternative. For example, Table 3.1-66, Alternative VI Regional Transit Person Trips (Linked Trips) Daily Volumes by Trip Purpose and Year, includes this information.

72.95. All those references [on pages 3.1-28 through 3.1-78 of the DEIR/Technical Appendix] to "Appendix Table A" should really be to Table B.

**Response.** The commentor is correct in pointing out reference errors relating to Appendix A. All incorrect references to Appendix A on pages are revised to refer correctly to Appendix B, as shown below:

Page 3.1-27, paragraph 2, sentences one and two of the DEIR/Technical Appendix are revised as follows:

Appendix Tables AB-1, AB-2 and AB-3 provide greater detail of changes in transit ridership under the proposed project, focusing on key geographic areas within the region that would be served by the BART-San Francisco Airport Extension. Table AB-1 shows transit ridership to the SFIA, Table AB-2, transit usage to northern San Mateo County, and Table AB-3, transit ridership from the Peninsula to downtown San Francisco.

Page 3.1-58, paragraph 2 under Impact 8, last sentence of the DEIR/Technical Appendix is revised as follows:

Details are shown in Appendix Table AB-20.

Page 3.1-62, Table 3.1-45, footnote of the DEIR/Technical Appendix is revised as follows:

Source: See Appendix Table AB-20.

Page 3.1-67, paragraph under Impact 7, sentence four of the DEIR/Technical Appendix is revised as follows:

A significant shift to rail transit for SFIA users would also occur, as shown in Table 3.1-51 and detailed in Appendix B (Tables AB-21 through AB-23).

Page 3.1-73, paragraph under Impact 2, sentence two of the DEIR/Technical Appendix is revised as follows:

(Details regarding transit ridership are provided in Appendix Tables AB-25 through AB-27.)

Page 3.1-73, paragraph under Impact 3, sentence of the DEIR/Technical Appendix is revised as follows:

Ridership at BART stations under this option is detailed in Appendix AB-28.

- 72.96. On page 3.1-79 [of the DEIR/Technical Appendix], Table 3.1-62, is the annual vehicle miles operated change from No Build really 5.2 or is it "about 4.1" as shown on the next page?

**Response.** The annual vehicle miles operated change from No Build is 5.2 as shown on page 3.1-79, Table 3.1-62 of the DEIR/Technical Appendix, not 4.1 miles as stated on page 3.1-80. The commentator correctly notes that the text should be modified to clarify that the annual vehicle miles change from Alternative VI to No Build is 5.2 miles. Page 3.1-80, paragraph one, sentence two, is revised as follows:

Annual vehicle miles would also increase by about ~~4.1~~ 5.2 million.

- 72.97. On page 3.1-79 [of the DEIR/Technical Appendix], Table 3.1-62, it is doubtful that CalTrain will really require 74 locomotives for peak hours particularly when CalTrain will need only 24 locomotives all day.

**Response.** Table 3.1-62, Alternative VI - Transit Operator Service Characteristics, in the DEIR/Technical Appendix should be modified to clarify the projected CalTrain Peak Vehicle Requirements. Numbers were lined up in the wrong cells and should be moved down one row. Table 3.1-62 on page 3.1-79, is revised as follows:

CalTrain	Projected Operations Change from No Build	
Peak Vehicle Requirements	24	7
Locomotives	<u>74</u>	<u>21</u>
Passenger Cars	<u>74</u>	<u>22</u>

- 72.98. We can assume there will be a drastic decrease in the number of express SamTrans runs during peak hours. Although the Alternative VI Tanforan parking garage will have twelve bus bays to accommodate 12 buses simultaneously, SamTrans needs only 3 more buses. Add to that the number of SamTrans runs into Millbrae, etc. and SamTrans obviously is going to be using buses currently occupied on their express runs.

**Response.** SamTrans buses would be rerouted to serve the proposed BART stations, as described on pages 2-24, 2-38, 2-46, 2-52, 2-53, 2-61, and 2-75 in the DEIR/Technical Appendix for all of the BART build alternatives. As an input to MTC's transportation modeling process, assumptions were made regarding which SamTrans bus routes would serve the proposed BART stations. The assumptions for Alternative VI are shown in Table 2.3-5 of the Alternatives Analysis/Draft Environmental Impact Report/Draft Environmental Impact Statement (AA/DEIR/DEIS). These bus rerouting assumptions do not represent a plan by SamTrans as to how it would reroute its bus service if a BART build alternative were selected as a project.

SamTrans would have to evaluate re-routing its bus routes prior to implementing any BART-San Francisco Airport Extension service. SamTrans would follow its standard procedure by giving public notice and holding a public hearing or hearings prior to any changes in its bus routing.

72.99. What kind of vehicles is SamTrans going to purchase for \$1,628,000? If all they need are seven, over No Build, that averages out to \$232,571 per bus.

**Response.** SamTrans would purchase seven standard 40-foot passenger transit buses. The unit costs of these buses including tax is about \$230,000.

72.100. On page 3.1-80 [of the DEIR/Technical Appendix], that statement "45 of 49 OD pairs" should really be 44 because there are five (out of 49) situations when time is actually increased.

**Response.** The commentor is correct. Page 3.1-80, paragraph under Impact 3, sentence three is revised as follows:

In most cases (~~45~~ 44 of 49 OD pairs), travel times would improve or remain unchanged.

72.101. The reason for such transit travel time savings to San Francisco State is hidden in the note on page 3.1-81 [of the DEIR/Technical Appendix]. These savings "assume utilization of the fastest transit mode (i.e. bus, BART, or CalTrain)." Since we all know BART and CalTrain do not go by State, are we to assume that these savings will be generated primarily by buses? It would be interesting to know exactly how much buses impact all these transit travel time tables.

**Response.** The transit travel times savings to San Francisco State include a portion of the trip on BART as well as on bus between the Daly City BART station and the campus. The savings in travel time to San Francisco State reflects the improved service with BART compared to the previous requirement of completing the entire length of the trip on bus.

72.102. Where are the transit travel time savings for the afternoon commute?

**Response.** The transit travel times and travel times savings are assumed to be the same for the afternoon peak hour as for the morning peak hour. The MTC model assumes the peak hour transit network is the same during the A.M. peak period as during the P.M. peak period, except the P.M. peak period operates in the reverse direction as the A.M. peak. This assumption is made because all the transit operators offer afternoon return service that is comparable to their morning services.

72.103. Table 3.1-64, on page 3.1-82 [of the DEIR/Technical Appendix], note 2 is incorrect because it refers to Table 3.1-105 as a table of regional transit person trips when actually that table is concerned with peak hour pedestrian entries and exits. Even if it is the correct, but misnamed table, 2,127,200 divided by 2,045 is 1,040 plus change. Obviously that is nonsense.

**Response.** Page 3.1-82, Note 2, Table 3.1-64 of the DEIR/Technical Appendix has a typographical error and is corrected to read as follows:

(2) Total transit boardings divided by regional transit person trips from Table 3.1-105  
Table 3.1-66 minus 1 which represents the boarding on the first transit system. The  
2,127,200 transit boardings from Table 3.1-64 is divided by the 1,295,300 linked  
transit trips in the year 2010 to obtain 1,642, then minus 1 yields 0,642.

This same correction is necessary for other tables dealing with regional transfers. Listed below are the tables from the DEIR/Technical Appendix followed by the corrected table reference for footnote 2:

Table 3.1-12: Table 3.1-14

Table 3.1-26: Table 3.1-27

Table 3.1-32: Table 3.1-34

Table 3.1-40: Table 3.1-42

Table 3.1-48: Table 3.1-50

Table 3.1-54: Table 3.1-56

- 72.104. On page 3.1-83 [of the DEIR/Technical Appendix], [Impact] 5 compares rail service to bus service and brags that "rail provides more reliable, on-time performance."...In my 12 years on SamTrans, I have seen only once when the bus broke down....If a train breaks down, the others don't just drive around it. Furthermore, whenever BART has a breakdown (and it does too frequently), why do you all resort to buses to transport your patrons around the blockage?...Clearly the statement, page 3.1-83, that rail provides more reliable, on-time performance is false.

**Response.** This item is discussed in more detail for the 1992 LPA on page 3.1-26 of the DEIR/Technical Appendix. The text states that the on-time performance is 96 percent for BART and CalTrain, and 84 percent for SamTrans bus service.

- 72.105. On page 3.1-83 [of the DEIR/Technical Appendix], note 7, it states "There would be a significant shift to rail transit for SFIA trips."...The negative you should be aware of is your use of the word "shift." That implies some patrons will "shift," or transfer from another form of transit. So what is your gain? The important point is how many new airport patrons, and employees too, will you get out of private vehicles and onto public transit.

**Response.** Note 7 on page 3.1-83 of the DEIR/Technical Appendix refers to Table 3.1-66, Alternative VI Regional Transit Person Trips (Linked Trips), which includes the change from the No Build Alternative in the same year. Linked trips remove the effect of transfers from one transit system to another and illustrate the benefit of extending BART service in northern San Mateo County.

- 72.106. On page 3.1-83 [of the DEIR/Technical Appendix], note 7, where in downtown San Francisco is "downtown San Francisco?"

**Response.** Downtown San Francisco is defined by MTC in their zonal system (as one of their "Superzones") as the portion of San Francisco that is east of Van Ness Avenue and north of the Central Freeway (Highway 101) and Townsend.

- 72.107. On page 3.1-84 [of the DEIR/Technical Appendix], note 3, this is not really an error but the information is sketchy. BART may want to expand on this much like was done in note 3, Table 3.1-3 on page 3.1-12 of the DEIS/DEIR.

**Response.** The commentor is correct that the information contained in footnote 3 to Table 3.1—3, Regional Transit Person Trips, in the Summary DEIR/SDEIS also applies to footnote 3 of Table 3.1-66 of the DEIR/Technical Appendix, Alternative VI Regional Transit Person Trips. The following is added to Note 3 on page 3.1-84: Analysis of 1993 Build Alternatives assumes the project is implemented in the baseline year (even though the actual opening year is 1998), and is provided as a means of measuring impacts due solely to the project without influences from general growth or other changes.

72.108. On page 3.1-87, Table 3.1-69, the 2010 entry for Tanforan is incorrect at 8,800, even if one rounds off the figures from Appendix Table A-40 (really B-40). The Tanforan station is expected to have 2,282 productions and 6,652 attractions for a total of 8,934 which can be rounded off to 8,900.

**Response.** Appendix Table B-40 contained typographical errors. The correct patronage volume for the Tanforan Station under Alternative VI is 9,800. Revised Appendix Table B-40 is provided following Response 10.12.

72.109. When, from Table B-40 [of the DEIR/Technical Appendix], one takes the base year total productions (2,075) from the 2020 total productions (2,282) one finds that the Tanforan BART station actually accounts for only 207 San Bruno patrons over what would have happened had there been no BART at all. Of course, we should divide that in half because everyone who leaves (entrance) San Bruno on BART should probably be expected to return (exit).

**Response.** The number of productions at the Tanforan Station under Alternative VI in the base year is a hypothetical case, i.e., if there were a Tanforan Station in 1993 under Alternative VI, there would have been 2,075 productions. The number of productions at the Tanforan Station is projected to grow by 207 trips from 1993 to 2010.

The source for Table 3.1-69, Alternative VI BART Station Daily Volumes, in the DEIR/Technical Appendix is revised as follows:

Source: See Appendix A B-40.

72.110. It is unconscionable that you would study so many intersections but totally ignore Huntington at Forest Lane, currently a four-way stop, and Huntington at Euclid that has a sizable number of autos trying to make a left turn onto Huntington. It does not take a rocket scientist to stand at either of those intersections and see that anything happening at Tanforan or in the neighborhood will impact Huntington drastically.

**Response.** The intersection of Huntington/Forest is intersection number 43, but was mistakenly excluded from Appendix C in the intersection tables presenting the level of service (shown on following page). The intersection of Huntington/Euclid was not analyzed for changes in the forecasted level of service. The intersections of Huntington/Forest Lane and San Bruno/Huntington are on either side the Huntington/Euclid intersection and these intersections were analyzed to capture the traffic impacts on this portion of Huntington Avenue.

72.111. Why was Third never studied when it has so much traffic going to and from the Belle Air Elementary School?

**Response.** The intersection of Third/San Bruno was analyzed under each alternative for all analysis years. The level of service results are presented in the tables in Appendix C, Traffic, of the DEIR/Technical Appendix.

72.112. On page 3.1-92 [of the DEIR/Technical Appendix], Table 3.1-70, No. 66 is actually El Camino Real and San Felipe, not El Camino Real and Sneath which is at 34. Change it at all the spots where it shows up, including the Appendix.

**Table 72.110**  
**Intersection Level of Service**  
**Huntington Avenue and Forest Lane (Intersection #43)<sup>(1)</sup>**

Year & Time Period	Proposed Project	I No Build	II TSM	III Base	IV E-101	V MLBR INTMD	V-A GTC	V-B San Bruno	VI <sup>(2)</sup> Millbrae Ave.
<b>1993</b>									
A.M.	A	A	A	A	A	A	A	A	A
P.M.	D	C	C	D	D	D	D	D	D
<b>1998</b>									
A.M.	A	A	A	A	A	A	A	A	A
P.M.	D	C	C	D	D	D	D	D	D
<b>2010</b>									
A.M.	A	A	A	A	A	A	A	A	A
P.M.	D	D	D	D	D	D	D	D	D

Source: Parsons Brinckerhoff, September 1994

1) This intersection has all-way stop controlled. The estimation of level of service for all-way stop controlled intersection does not produce a volume-to-capacity ratio and thus the level of service cannot be compared to the No Build Alternative.

2) The level of service under the Aerial Design Option LPA are the same as under the Alternative VI LPA.

**Response.** The commentator is correct. Page 3.1-92, Table 3.1-70 Intersection 66 is revised as follows; this change is made to the intersection tables in Appendix C as well. These Appendix tables are Tables C-1, C-3, C-5, C-7, C-9, C-11, and C-15.

66. Huntington & Sneath San Felipe

- 72.113. On page 3.1-92 [of the DEIR/Technical Appendix], Table 3.1-70, intersections 137 through 145 appear to not be appearing on Figure 3.1-3 and the data is missing in the Appendix.

**Response.** The five intersections listed, including Huntington/Herman, Huntington/South Park-and-Ride Entry, Huntington/San Mateo Access, San Mateo/San Mateo Access, and Huntington(new)/Sneath were proposed intersections for a location of the Tanforan Station that was excluded from further study prior to the release of the DEIR/SDEIS. The inclusion of these five intersections in Table 3.1-70, Analysis Intersection, of the DEIR/Technical Appendix was an error. Table 3.1-70 is revised to reflect the deletion of the following intersections:

- 137. Huntington & Herman
- 138. Huntington & South PNR Entry
- 139. Huntington & San Mateo Access
- 140. San Mateo & San Mateo Access
- 145. Huntington (new) & Sneath

Intersections 146, 162, 163, 164, and 165 are not renumbered to reflect the above deletions. The number identification is part of the traffic models and is linked to references in a number of tables.

- 72.114. On page 3.1-97 [of the DEIR/Technical Appendix], San Mateo and Huntington Avenues do not cross under I-380. They intersect further south near the American Legion Hall across the streets from the railroad tracks. Under I-380 they veer from one another and then form two sides of the triangle that imprisons the Fifth Addition.

**Response.** The commentator is correct that the intersection of San Mateo and Huntington is south of San Bruno Avenue and to the west of the SPTCo right-of-way. Page 3.1-97, paragraph three, last sentence of the DEIR/Technical Appendix is deleted as shown below:

~~San Mateo and Huntington Avenue cross under I-380~~

- 72.115. On page 3.1-98 [of the DEIR/Technical Appendix], the last four bullets are repeats of the top four bullets.

**Response.** The last five bulleted items were included twice. The last five bulleted items on the list on page 3.1-98 of the DEIR/Technical Appendix are therefore deleted.

- Improvements to the Sullivan Avenue and Serramonte off ramps on I-280, I-380 access ramps, and widening of I-280 near the I-280/I-380 interchange.
- Widening of Route 92 between the San Mateo Bridge and Highway 101 from four to six lanes, with new lanes for high occupancy vehicles, defined as vehicles with two or more occupants.

- Improvements to Highway 101 freeway interchanges at Candlestick Park (baseball/football stadium), Oyster Point Boulevard (Oyster Point interchange under construction), and Broadway and Peninsula Avenues in the City of Burlingame.
- Introduction of auxiliary lanes to improve Highway 101 on- and off-ramp circulation between Route 92 (San Mateo Bridge) and the San Mateo/San Francisco county line.
- Construction of 46 CalTrain grade separations in San Mateo County, including Millbrae Avenue in Millbrae (in final design), and Angus, San Bruno, and San Mateo Avenues in San Bruno (only partial funding is available for the grade separations in San Bruno).

72.116. In calculating the intersections of Huntington/San Bruno Avenue, San Bruno Avenue/San Mateo Avenue and San Mateo Avenue/Huntington did you use real time delays by observing the mess at these intersections or did you pick arbitrary laboratory delays?

**Response.** Traffic delays for the closing of the railroad crossing gates were based on the observed time that these gates were down during peak hour measurements conducted in 1993 and 1994 at these intersections. These observed times were used to reduce the traffic capacity at these intersections for the year 1993. For the years 1998 and 2010, capacity was reduced further to account for the forecasted increase in the number of CalTrain trips. The level of service estimates in the DEIR/SDEIS represent an average for the entire peak hour, and do not reflect the worst 5-minute period when the gates are down. The initial traffic capacity estimated at these intersections was based on numbers published in San Mateo County's Congestion Management Plan. Under all of the BART build alternatives except for the Base Case Alternative, BART would either be underground or not cross San Bruno Avenue in this vicinity. Once construction is completed, BART would have no impacts on the traffic delays associated with the at-grade crossings of trains at San Bruno and San Mateo Avenues. Under the Base Case Alternative, San Bruno and San Mateo Avenues would cross under the BART alignment.

72.117. Table C-I #36 [of Appendix C to the DEIR/Technical Appendix], Huntington and Sneath does not have a signal. It is a three-way stop, believe me, I walk through it every day on my way to the Post Office.

**Response.** The commentor is correct in stating that the intersection of Huntington/Sneath is unsignalized with all-way stop sign controls, and the text in Appendix C has been revised accordingly. This intersection would be signalized under the BART build alternatives with a Tanforan Station, i.e., the 1992 LPA, Alternative III, and Alternative VI, and signalization is an option under Alternatives IV and V.

72.118. Table C-I #62 [of Appendix C to the DEIR/Technical Appendix], Huntington and Angus is another three-way stop. Depending on which side of the tracks you counted, there is no stop for the traffic coming off the tracks. This idea of clearing the traffic that might get stuck on the tracks with an oncoming train is the same reason that on San Bruno Avenue at Huntington and at San Mateo Avenue the signal remains green longer to clear the tracks.

**Response.** The level of service estimated at this intersection under each alternative was based on the existing configuration. Westbound traffic on Angus stops on First Avenue before proceeding west, over the railroad tracks, allowing the eastbound traffic on Angus to clear this at-grade crossing. The westbound traffic on Angus Avenue does not stop at the intersection with Huntington Avenue to prevent queuing onto the railroad tracks, while traffic on the other three legs at this intersection must wait at the stop until this westbound traffic has cleared.

72.119. Table C-1, #66 [of the DEIR/Technical Appendix] is really Huntington and San Felipe. These last three errata [Comments 72.118, 72.119, and this comment] should be fixed on all the appropriate tables in this Appendix.

**Response.** The commentor is correct regarding the intersection numbered 66; the intersection numbered 66 should read Huntington & San Felipe, and is so revised in Appendix C. This correction was acknowledged in Response 72.113.

72.120. Table C-3 [of Appendix C to the DEIR/Technical Appendix], you are missing intersections 43 and 145, at least.

**Response.** Please refer to Response 72.111 for a discussion of the intersection of Huntington/Forest Lane. The intersection numbered 145, Huntington/Sneath, was a proposed reconfiguration of an existing intersection under a BART build alternative that was deleted from consideration. The only listing of the Huntington (new)/Sneath intersection in the DEIR/Technical Appendix is in Tables 3.1-70, Analysis Intersection Existing and Proposed, and C-1, Intersection Level of Service Year 1993 No Build. Intersection 145 was not excluded from Table 3.1-70, or Table C-3, but should have been deleted. It has now been deleted.

72.121. On page 3.1-103 [of the DEIR/Technical Appendix], the reference to Appendix Table B-1 is incorrect, aye?

**Response.** The commentor is correct. Page 3.1-103, paragraph four, sentence five of the DEIR/Technical Appendix is revised as follows: replace reference to "Appendix Table B-1" with "Appendix Table C-1."

Results of analyzed intersections are included in Appendix Table B-+ C-1.

72.122. On page 3.1-105 [of the DEIR/Technical Appendix], of the named intersection, Huntington and Tanforan Driveway North is the only one without an intersection number....It should be 162 and is missing on all of them throughout the alternatives.

**Response.** The Huntington and Tanforan Driveway North intersection should have the number 162 in parenthesis to aid the reader in finding this intersection on the traffic tables in Appendix C. The intersection of Huntington and Tanforan Driveway North should have "(162)" on pages 3.1-105, 3.1-109 and 3.1-115, and the text is so revised, as shown below.

In addition, Tanforan Driveway North is misidentified as Tanforan Driveway South on page 3.1-109. This text is also corrected as shown below. Page 3.1-105, fourth bullet, of the DEIR/Technical Appendix, is revised as follows:

- Huntington/Tanforan Driveway North (162).

Page 3.1-109, third bullet, of the DEIR/Technical Appendix, is revised as follows:

- Huntington/Tanforan Driveway South North (162).

Page 3.1-115, second bullet, of the DEIR/Technical Appendix, is revised as follows:

- Huntington/Tanforan Driveway North (162).

- 72.123. On page 3.1-106 [of the DEIR/Technical Appendix], to be consistent, and informative, include the probable mitigation measure at 16, 34, 70 and 162.

**Response.** Mitigation measures for significantly impacted intersections are discussed in detail in the Analysis by Alternative subsection of the Traffic Section. As described in this subsection, these traffic improvements cannot be appropriately summarized for a table. For example, the improvements to the Chestnut and Grand Avenue intersection (16) involve restriping and signal phasing changes.

- 72.124. Those of you who have spent cumulative hours at that four-way stop at Huntington and Forest may be interested in learning this information. The P.M., with No Build, is expected to go from a C to a D by 2010 with 1545 vehicles traversing the intersection. Now that makes sense, right? If Alternative VI is built (no more than a few hundred feet away) the estimated volume is 1593 vehicles, a paltry 48 cars more per hour. Obviously, very few motorists will exit the parking garage at Tanforan and travel down Huntington through the Forest intersection...This is ludicrous.

**Response.** The commentor is correct that an estimated 1,545 vehicles are expected to use the Huntington/Herman (Forest Lane) intersection during the P.M. peak hour under the No Build in 2010, compared to 1,593 vehicles under Alternative VI. Only local residences from Belle Air, San Bruno Park, and Lomita Park neighborhoods were assigned by the sub-area traffic model to use Huntington Avenue south of the intersection with Herman Avenue under Alternative VI. Drivers coming from south of San Bruno on Highway 101 seeking a BART station are expected to use the Millbrae Avenue Station under Alternative VI and the Alternative VI Aerial Design Option, instead of taking the San Bruno Avenue Interchange with Highway 101 and traveling on Huntington Avenue.

- 72.125. On page 3.1-107 [of the DEIR/Technical Appendix], "All the BART build alternatives would adversely impact the Highway 101 freeway segment from Millbrae Avenue to Broadway." Then why in heck build it? "The Tanforan Station option under the Proposed Project and Alternatives III, IV, V and VI has an adverse affect on the intersection of El Camino Real and Sneath." Then why in heck build it? "The increase in freeway volumes (south of SFO) is attributable to BART access traffic." Then why in heck build it?

**Response.** If one of these build alternatives of the project is approved, it will be with the finding that the overall benefits of the project outweigh these impacts that have been identified as significant and unavoidable. The traffic impact to Highway 101 is listed in the DEIR/SDEIS as significant and unavoidable while the traffic impact to the intersection of El Camino Real and Sneath Avenue would be mitigated to improve service to an acceptable level. One purpose of assessing and preparing the EIR/EIS is to present the advantages and disadvantages of every alternative analyzed so that policy-makers and the public have the necessary information before making decisions on project adoption.

- 72.126. On page 3.1-143 [of the DEIR/Technical Appendix], among other places, it states that BART will contribute its fair share of the cost, "based on the direct project impact identified in the 1998 analysis." What exactly does that mean? Table 3.1-9 notes that the AM information is LOS D, 135 and -74. The PM information is LOS E\*, 55, and -80. How does one figure the "fair share?"

**Response.** If the significant impact to the intersection in 1998 is a result of both the implemented BART extension and a growth in background traffic, then BART would fund its proportionate share of the cost of the traffic mitigation measure, based on the percent of BART-

related traffic expected at the intersection. For example, possible mitigations exist for unsignalized intersections. If the intersection is mitigated with all-way stop signs, then the mitigation cost should be small because only two new stop signs and some pavement delineation would be required. A second measure would be to install a traffic signal which would incur more significant costs.

- 72.127. On page 3.1-148 [of the DEIR/Technical Appendix], if the downtown station option is selected, the intersection of San Mateo Avenue and Angus would be significantly affected....Won't the adjacent intersections South down San Mateo Avenue, and both East and West along Angus be significantly affected? It just stands to reason, I think, that the cars impacting San Mateo Avenue and Angus have to come from somewhere along San Mateo Avenue or Angus.

**Response.** Other intersections in the vicinity of the San Mateo/Angus intersection were analyzed for significant impacts. Traffic traveling from the east on Angus toward the San Bruno Downtown Station would travel through the intersections of Third/Angus or San Bruno/Third. Traffic traveling from the south on Huntington or on El Camino Real would travel through the intersections of Huntington/San Felipe or El Camino Real/San Felipe, respectively. To the north of the San Mateo/Angus intersection is the San Mateo/Huntington intersection and then the San Mateo/San Bruno intersection, and west of the San Mateo/Angus intersection are the El Camino Real/San Bruno and El Camino Real/Jenvein intersections. Of these intersections analyzed, the San Mateo/Angus intersection would be the only one with significant impacts. As part of the station design, the traffic capacity improvements would be made to the intersections of Third/Angus and Third/Pine which would be signalized if signal warrants were satisfied, otherwise all way stop sign controls would be installed to facilitate flow into and out of the garage at the Downtown San Bruno Station.

- 72.128. Your mitigation measures absolutely do not address the significant impacts along Third and along Angus....You do not...address the Third and Pine problem where you intend to locate an entrance to the three-level garage.

**Response.** The San Bruno Downtown Station would result in significant traffic impacts at the San Mateo/Angus intersection as discussed in Response 72.127. The intersections of Third/San Bruno and other intersections with Angus Avenue (listed in Response 72.127) were analyzed and found not to be significantly affected, except at the intersection of Third/Angus where the level of service may degrade by two levels. The intersection of Third/Angus would be signalized as part of the station design.

Of these intersections analyzed, the San Mateo/Angus intersection would be the only one with significant impacts. As part of the station design, the traffic capacity improvements would be made to the intersections of Third/Angus and Third/Pine which would be signalized if signal warrants were satisfied, otherwise all way stop sign controls would be installed to facilitate traffic flow into and out of the garage at the Downtown San Bruno Station.

- 72.129. On page 3.1-161 [of the DEIR/Technical Appendix], there is discussion of LOS D and E from the Tanforan driveway onto Huntington. "A traffic signal at this intersection would be too close to the signal at the BART parking garage entrance."...Your only solution is for patrons to exit the parking lots through other exits. Too bad you never showed where those patterns will let out.

**Response.** As analyzed under Alternative VI in the DEIR/DEIS, the nearest alternative exit to the Huntington/Tanforan Driveway North intersection is the Sneath/Sears entrance intersection. For drivers traveling north on Huntington Avenue, an alternative route to making a left at the Huntington/Tanforan Driveway North intersection would be to turn right at the Sneath/Sears

entrance intersection and then turn left at the Sneath/Huntington intersection. For drivers traveling west on Sneath Avenue, an alternative routing is to turn left at the Sneath/Sears entrance intersection.

The Tanforan Station design concept plan under the Alternative VI LPA and the Aerial Design Option LPA has been revised to move the location of BART parking facilities. The Huntington/Tanforan Driveway North would be replaced by a different entry/exit serving the bus bay facility. Please refer to Response 17.5 for further discussion of the revised Tanforan Station design.

- 72.130. On page 3.1-162 [of the DEIR/Technical Appendix] is that correct? Building a larger parking garage right there on Tanforan property, with maybe thousands driving through that intersection and many more riding those 12 buses, there will be only a four percent increase in the V/C ratio? That is way beyond belief.

**Response.** If this comment is referencing the four percent increase in the volume-to-capacity ratio that would occur at the El Camino Real/Sneath intersection, then that percentage change is identified as a significant impact to be mitigated. Please note that percentage change in the volume/capacity ratio is not equivalent to percentage change in traffic volume at an intersection.

- 72.131. On page 3.1-162 [of the DEIR/Technical Appendix], the mitigation measures for the El Camino Real/Sneath intersection consist of implementation of the City of San Bruno's programmed improvements. Sure, BART, mess up the whole area and then leave it to San Bruno to mitigate your impacts....Is there a reason why BART no longer mentions that it will pay its (dubious) fair share of the mitigation costs? Is it that a four percent increase is significant yet not really significant?

**Response.** The mitigation measure described on page 3.1-162 references Mitigation Measure 5.3 for the 1992 LPA on page 3.1-125 of the DEIR/Technical Appendix, which states that "BART will contribute a fair share of the cost of this improvement, based on the direct project impact identified in the 1998 analysis."

- 72.132. On page 3.1-162 [of the DEIR/Technical Appendix], you seem to imply that the parking lots identified as at CalTrain and Artichoke Joe's [are] currently leased from the City of San Francisco Water Department. Actually, if you check into it, I believe you will find that only a part of it belongs to the San Francisco Water Department.

**Response.** Volume I of this FEIR/FEIS revises incorrect identification of property ownership as appropriate. Artichoke Joe's parking lots are located on City and County of San Francisco (CCSFWD) lands which are leased to the City of San Bruno, which then has sub-leased the land to Artichoke Joe's. CalTrain property is presently owned by the State of California (Caltrans) and is in the process of being transferred to the Peninsula Joint Powers Board (PJPB), which manages CalTrain. Artichoke Joe's parking lots are located on CCSFWD lands and CalTrain Property. CalTrain does maintain an interest in the CalTrain parking lot even though fee title remains vested with Caltrans.

- 72.133. Is it true that 25 cents is the current maximum that BART can charge for parking on the Peninsula? If so, how will BART reconcile the difference between what it charges and what CalTrain charges at their Intermodal garages?...If BART charges only 25 cents, CalTrain will suffer a revenue loss because motorists parking at the Intermodal stations will select the less expensive BART parking.

**Response.** SamTrans may establish parking charges at parking lots serving stations of the BART extension that are funded and built as part of the Colma Project or BART-San Francisco Airport Extension. Pursuant to the BART/SamTrans Comprehensive Agreement Pertaining to BART System Extension, 1990, parking charges must be equal to or greater than the minimum BART system parking fee, which is 25 cents. SamTrans may need to coordinate its parking charges (if any) with the Peninsula Corridor Joint Powers Board, which oversees CalTrain.

It should be noted that 61 spaces are available for all-day parking at the South San Francisco CalTrain Station, 169 spaces at the San Bruno CalTrain Station, and 200 spaces at the Millbrae CalTrain stations, for a 50 cent charge. With purchase of Monthly and Monthly Discount tickets, monthly parking permits may be purchased for \$4.00.

Assuming that the Joint Powers Board reduces its daily parking charge from 50 cents to 25 cents, at 100 percent occupancy and a 290 equivalent weekdays per year annualization factor, the maximum annual lost CalTrain revenue for parking at the South San Francisco, San Bruno, and Millbrae CalTrain Stations would be \$31,175 [(50¢ - 25¢ cents) x (61 + 169 + 200 spaces) x 290 equivalent weekdays per year]. Any usage of monthly parking passes would reduce this revenue loss.

- 72.134. Has BART figured out how much revenue CalTrain will lose if it has to decrease its parking rates at the South San Francisco, San Bruno, and Millbrae parking lots?

**Response.** Please refer to Response 72.133 for a discussion of parking charges.

- 72.135. Why is it that when patronage at Daly City is reduced the demand for parking reduces by a greater number? Are patrons driving two or more cars to the station each day?

**Response.** The difference between the decrease in parking demand at the Daly City Station, with or without the BART extension, and the decrease in transit patronage at the same BART station, with or without the project, is insignificant. The difference between the reduction of patronage and parking demand exists because more automobile access trips divert to another BART station than do transit access trips. The extension of BART creates new choices for park-and-ride patrons, while transit access patrons do not have as many choices. Most of the Daly City Station's transit access comes from the local areas of Daly City, San Francisco, and Colma. However, some of the auto access patrons drive from areas that are farther south. If BART is extended, a larger shift of auto access trips to the southern stations occurs.

- 72.136. Why is it that for Alternatives IV through VI, when the Daly City patronage remains at 13,300, the parking demand fluctuates between 1,880 and 1,900?

**Response.** This occurs because of rounding adjustments in the model and fluctuation in station designs for specific alternatives that make another station on the extension more attractive to patrons. The initial number of persons requiring parking at a BART station was estimated by the MTC model considering zone-by-zone accessibility. The traffic sub-area model further refined this estimate by considering traffic conditions and travel times to allocate BART patrons by station.

- 72.137. In San Bruno the garages built for both Alternative V-A and Alternative V-B will demand the identical 2,340 spaces yet the patronage figures respectively vary from 18,800 (37,600/2) and 24,900 (49,800/2)....Are we to assume the additional 6,100 people, under Alternative V-B at San Bruno will not need any more parking because they will be walking up to or taking a bike to the station? The LOS for both is identical.

**Response.** The park-and-ride access to the I-380 San Bruno Station or the Downtown San Bruno Station would be the same under either Design Option V-A or Design Option V-B. The difference in patronage between these two alternatives is due to transit access to and from either of these San Bruno station options. Under Design Option V-A, the BART alignment continues past the City of San Bruno to the Airport GTC BART Station providing direct access onto SFIA property for BART patrons traveling from north of San Bruno. Under Design Option V-B, these BART patrons would exit the San Bruno BART station and transfer to the proposed ALRS or to SamTrans buses to access sites on SFIA property. In essence, the patronage (12,400 riders) at the Airport GTC Station under Design Option V-A shifts to the San Bruno station under Design Option V-B. The riders going to or from SFIA who use the GTC Station under Alternative V-A do not affect the parking requirements at the San Bruno station because these patrons board or exit at other BART stations. That is why patronage at the San Bruno station under Alternative V-A is less than patronage at the San Bruno station under Alternative V-B without affecting parking demand.

- 72.138. On page 3.1-164 [of the DEIR/Technical Appendix], Table 3.1-95, the figures for San Bruno under Alternative V-A and Alternative V-B (3,000) [are] not in keeping with the drawings [Figures 4.3 and 5.2].

**Response.** Both the text and the figures referenced by the commentor indicate a station parking design of 3,000 cars. In Figure 4.3, three parking areas are shown (175 cars, 1,325 cars, and 1,500 cars) with a total parking capacity of 3,000. In Figure 5.2, 3,000 total cars would be accommodated in two parking areas (200 cars plus 2,700 cars.)

- 72.139. All the project corridor garages under Alternative VI are designed with 20 percent more spaces than will be need in 2010, twelve years after the scheduled opening. Either this is outstanding visionary modeling or it is outstanding overkill construction....When the powers that be sit down to select an option, or elements of several, they should seriously look at these estimates. Maybe they should design less obtrusive garages with the possibility of expansion 25 years down the road when they will have to be retrofitted any way with newer earthquake standards.

**Response.** Please refer to Response 14.25 for a discussion of the BART parking supply design.

- 72.140. On page 3.1-165 [of the DEIR/Technical Appendix], at the bottom, it states under No Build the Colma Station will need only 1,770 stalls yet on page 3.1-164, Table 3.1-95, it calls for 1,740.

**Response.** A review of the DEIR/Technical Appendix text on page 3.1-165, last paragraph, second sentence shows an estimated number of 1,770 parking stalls at the Colma station under the proposed project. The parking demand at Colma under the 1992 LPA is listed at 1,770 in Table 3.1-95 on page 3.1-164. The commentor appears to be referencing the Daly City Station, which was designed with 1,740 parking spaces.

- 72.141. How does a RPP deal with day-long guests of residents in the impacted neighborhoods?

**Response.** Under a residential parking program, day passes are available to residents for overnight guests.

- 72.142. How often does BART envision days of highest demand at Hickey and Tanforan?

**Response.** Please refer to Response 14.25 for a discussion of variances in daily patronage.

72.143. Since this Tanforan Station is adjacent to the Post Office, how will BART accommodate the overflow parking that regularly slops over from the Post Office and Costco throughout the year?

**Response.** The Tanforan Station under the 1992 LPA and Alternatives III, IV, and V would be located just to the south of the Post Office on Huntington Avenue. Parking at this station and all the BART extension stations must be validated inside the paid area of the station, otherwise vehicles would be ticketed.

Any parking spaces taken from use by the Tanforan Park Shopping Center would be replaced on a one-to-one basis. The location of this replacement parking would be negotiated with the owners of Tanforan Park Shopping Center; the replacement parking is not likely to be convenient to either the Post Office or Costco and would be unlikely to receive overflow parking.

72.144. Under Alternative VI, where the station will be built on the location of the current Christmas overflow parking lot, how will RPP help the Tanforan merchants?

**Response.** The loss of overflow parking for the Tanforan Park Shopping Center is recognized as a significant impact with the Tanforan Station under the 1992 LPA and Alternatives III, IV, and V. Under parking Impact 5 for the 1992 LPA on page 3.1-168 of the DEIR/Technical Appendix, the mitigation measure of replacement parking is listed and states in part, "BART will provide one-to-one replacement parking on the Tanforan Shopping Center property for any lost stalls." The other alternatives with the same Tanforan Station refer back to this mitigation measure as also applying to these alternatives.

The Residential Permit Parking program would not be used for mitigation for spillover parking at the Tanforan Park Shopping Center. Other measures to prevent spillover parking within this shopping center are discussed in Response 241.9. Please refer to Response 14.38 for further discussion of spillover parking.

72.145. What are the "economic impacts" San Bruno, and all the cities for all the alternatives, can anticipate?

**Response.** BART analyzed, and included sections regarding, impacts on economic activity and growth-inducing impacts in the DEIR/SDEIS and DEIR/Technical Appendix. See Chapter 3, Section 3.2 and Chapter 4, Section 4.5 of these materials. Impacts on economic activity are broken down by city and include San Bruno.

72.146. Since the RPP has "been used successfully around other BART stations" pray tell what happens to those motorists who park in front of the residences and incur parking violations? Do those fines go to the impacted resident if and when collected? Define "successfully."

**Response.** Fines are paid to the county and used to fund the residential permit parking program and associated court costs. "Successful" means that streets adjacent to a transit station are not impacted significantly by spillover parking from the station.

72.147. How far do you intend to extend the RPP from each station?

**Response.** The area to be defined for the Residential Permit Parking program would be flexible and would depend on the standards adopted by the affected community and the City or County agency responsible for administering the program. Residents could define the boundaries. In the

City of Oakland program, the minimum area to be considered for a new residential permit parking program is six contiguous block faces and 80 percent of the area must be zoned residential.

- 72.148. On page 3.1-167 [of the DEIR/Technical Appendix] it states that some BART patrons at the Tanforan Station may find it more convenient to park in the Tanforan Shopping Center or Towne Center parking lots....The parking at Towne Center is already so bad that very often Towne Center patrons park across Huntington in the Tanforan overflow lot and across Sneath in the Tanforan Shopping Center lot....When these traffic studies were done, how many commuters did you find parking in the Tanforan Shopping Center and taking SamTrans? Did you notice how many folks park their vehicles in the Tanforan Shopping Center parking lot and hop into other autos and carpool?

**Response.** Though a survey was not performed on the number of SamTrans patrons or carpool users that park in the Tanforan Park Shopping Center parking lots or on Towne Center patrons who park in the Tanforan Park Shopping Center parking lots and walk across the street(s) to a bus or carpool, the Tanforan BART Station would be expected to attract some of the SamTrans patrons and possibly some of the carpoolers using the Tanforan Park Shopping Center parking lots to the extent such users exist. Parking by commuters at these two shopping centers is not permitted and could be controlled by monitoring cars parked before 9:00 A.M., earlier than stores are opened but during the morning commute period. Please refer to Responses 14.25, 14.28 and 241.9 for further discussion on spillover parking.

- 72.149. On page 3.1-167 [of the DEIR/Technical Appendix] you describe the mitigating measures using physical barriers and comfort standards. How will barriers, fencing and landscaping at the Tanforan Station discourage BART patrons from parking across the street in the Tanforan Shopping Center? No amount of cameras is going to distinguish if that particular patron walking across Huntington actually parked at Tanforan or if he left his car at home.

**Response.** The intent of Mitigation Measure 3.1 on page 3.1-167 of the DEIR/Technical Appendix, which relates to closed circuit television and patrols, is to provide measures that ensure that patrons feel secure with respect to personal safety and the safety of their vehicles at the BART station. In addition to the barriers, fencing and landscaping listed in this Mitigation Measure, other measures relating to overflow parking at Tanforan Park Shopping Center are discussed in Response 241.9.

- 72.150. On page 3.1-168 [of the DEIR/Technical Appendix], at 5.1, it says BART will provide one-to-one replacement parking on the Tanforan Shopping Center property for any lost stalls. "A parking garage would not have environmental impacts unless it were built on the eastern edge of the shopping center property."...Does this mean BART will build another garage on Tanforan Shopping Center property to replace the overflow parking lot it is using?...How many stalls will there be in this additional garage?...What are the environmental impacts it will have if built on the eastern edge of the shopping center property?...Where else on the property (over near El Camino Real?) will BART locate this new garage?

**Response.** The one-to-one replacement parking under Mitigation Measure 5.1 for the 1992 LPA on page 3.1-168 of the DEIR/Technical Appendix means that BART would pay for replacing the number of parking spaces required for the Tanforan BART Station and therefore lost for use by Tanforan Park Shopping Center. The location of the replacement parking would be negotiated with the owners of the Tanforan Park Shopping Center. The replacement parking would likely be in the form of a garage although another solution may be implemented, such as the purchase and conversion of a vacant property on the Tanforan Park Shopping Center property. The DEIR/Technical Appendix states on page 3.1-168 that if the garage were built on the eastern

edge of the Tanforan Park Shopping Center property, it would not have visual impacts on the Fifth Addition neighborhood. Under the revised Tanforan Station concept plan, Huntington Avenue would be relocated to the east (where the SPTCo right-of-way is) and the BART alignment would be in subway under the current location of Huntington Avenue and along the eastern edge of the Tanforan Park Shopping Center.

- 72.151. Is the cost for this mitigation garage [on the Tanforan Shopping Center property] included in the cost for this alternative?

**Response.** The cost for the new Tanforan garage is included in the project cost estimates, please refer to Response 72.152 for further discussion of the parking garage cost.

- 72.152. How much will this additional Tanforan Shopping Center parking garage cost?

**Response.** As noted in Response 72.151, the cost of the Tanforan parking garage is included in the project cost totals. However, the conceptual cost estimates found in the DEIR/SDEIS do not outline every line item included in the construction cost of each alternative, and the cost of this new facility is not defined as a separate cost item in current financial estimates. The Aerial Design Option LPA, selected in November 1995, does not include the Tanforan parking garage as described in the DEIR/SDEIS under Alternative VI. Please refer to the Financial Analysis in Volume I of this FEIR/FEIS to review a cost estimate for the Aerial Design Option LPA as advanced by further engineering and cost estimating.

- 72.153. What will be the visual impacts of [the Tanforan garage's] location on the El Camino Real and/or Angus sides of the property if placed there?

**Response.** The parking structure at the Tanforan Station in San Bruno will be visible from El Camino Real and Sneath. It will not, however, appear out of scale or create significant visual differences, since the adjacent shopping facilities and garages will block the majority of the BART parking structure from view.

- 72.154. Who exactly is it who owns this targeted property, Sears, Penny's, Emporium, New York Life? As you know, title for the various portions of the Tanforan Shopping Center parking as well as the buildings in which the big three are located is held by various parties.

**Response.** Property fee title interests are held by New York Life Insurance Company, Emporium, Sears and J.C. Penny. The Hapsmith Company has a long-term lease with New York Life Insurance Company over certain portions of the shopping center not held in fee interest by others.

- 72.155. Is it true that if you add the two additional mitigating levels to the Tanforan Station parking garage that its grade and three levels will be approximately 40 feet high and the station itself will be approximately 35 feet high?

**Response.** The commentor is correct. The parking garage at the Tanforan Station under the 1992 LPA, with the proposed mitigation to increase the number of parking spaces, as well as under Alternatives IV and V, would have one ground level plus three elevated levels. The structure would have an elevation of 36 feet at its perimeter plus an elevator penthouse that would be 43 feet at its highest point.

72.156. So now are we thinking we will need a four-level garage on the northeastern side of Huntington, another multi-level garage across Huntington maybe near Sears and then there is the current Tanforan Shopping Center parking garage?

**Response.** Please refer to Response 72.150 for a discussion of the replacement parking for the loss of the Tanforan Park Shopping Center's overflow parking spaces, and Response 72.153 for a discussion of the Tanforan Station garage.

72.157. You left to our imaginations the dimensions of these new facilities, in particular the heights of the two new garages. Please include them someplace in the DEIS/DEIR.

**Response.** Please refer to Response 72.156 for a discussion of the height of the parking garage at the Tanforan Station under the 1992 LPA, with the proposed mitigation to increase the number of parking spaces, and under Alternatives IV and V. Please refer to Response 72.150 for a discussion of the replacement parking for the loss of the Tanforan Park Shopping Center's overflow parking spaces.

72.158. On page 3.1-168 [of the DEIR/Technical Appendix], you state that air passengers might park in the project corridor stations and take BART to the airport for a day-long business trip. Thanks for thinking of us. "These air passengers may displace BART to CalTrain parking patrons at a BART Station. This potential additional parking demand has not been accounted for in the parking estimates."...For project corridor peace of mind, can your estimators project some figures for these same-day travelers?

**Response.** Please refer to Response 10.10 for a discussion of the potential for the one-day air passenger to park at certain BART stations rather than park in airport lots, and BART's strategy for prevention of such parking.

72.159. Has BART ever considered how it can prevent this scenario from happening? Will you use barriers and landscaping again?

**Response.** Please refer to Response 10.10 for a discussion of the potential for the one-day air passenger to park at certain BART stations rather than park in airport lots, and BART's strategy for prevention.

72.160. On page 3.1-179 [of the DEIR/Technical Appendix], some BART riders and air passengers "may attempt to park on commercial streets in downtown San Bruno."...How many vehicles does BART think will impact San Bruno commercial streets?...How much will downtown San Bruno merchants lose annually in business driven away because there is no longer parking available?...How many additional parking monitors will San Bruno have to employ and how much will that cost the city?

**Response.** Please refer to Response 241.9 for a discussion of spillover parking from the proposed BART stations and why the potential number of vehicles cannot be quantified. If necessary, a detailed parking management plan will be completed by BART and SamTrans if a problem is identified regarding spillover parking. Locally borne enforcement costs will be discussed in this plan if a problem is identified regarding spillover parking.

72.161. On page 3.1-180 [of the DEIR/Technical Appendix], Table 3.1-102 shows a San Bruno current Station design of 3,175 while on Table 3.1-95, it is 3,000.

**Response.** All three tables refer to the same parking demand of 2,340 spaces, and all parking and associated traffic impacts are consistent. The differences among the tables are in the station design, and the correct number of parking spaces in the design in Table 3.1-102, Design Option V-A Estimated Station Parking Space Requirements, and Table 3.1-103, Design Option V-B Estimated Station Parking Space Requirements, in the DEIR/Technical Appendix, are modified to read 3,000 under both the “Current Station Design” and the “As Mitigated” columns.

- 72.162. What is the mitigation measure being proposed to increase parking capacity by 835 stalls at the Alternative V-A downtown BART parking garage?

**Response.** Parking lots at BART stations along the extension were designed for an average day plus a 10 to 20 percent reserve for days that exceed the average. This percentage was increased at end-of-the-line stations to reserve added capacity for days when demand is at its highest, such as when a traffic accident during the A.M. peak period causes diversion to BART. The San Bruno BART station in Design Option V-A serves as an end-of-the-line station.

- 72.163. On page 3.1-186 [of the DEIR/Technical Appendix]. “Each of the city’s...plans calls for a bikeway along the railroad right-of-way. The BART extension is inconsistent with these plans. According to state law, BART is not required to comply with local policies....”...How does this attitude against bicyclists jive with BART’s Good Neighbor Policy?...Granted you do not have to provide mitigation measures for this problem but maybe you would like to suggest what we can do with our bikes?...How does BART’s bicycles-be-damned attitude jive with other regional efforts to reduce pollutants generated by motor vehicles? What is BART’s policy on carrying bicycles on its trains?...Any final project must encourage the use of bicycles. This is not downtown San Francisco or Oakland. People on the Peninsula ride bicycles in our lovely climate.

**Response.** The state law that does not require compliance with local general plans is described in the DEIR/SDEIS in order to explain that impacts to these proposed bikeways due to the alignment or stations of the BART extension are not significant impacts under the established significance criteria. Nonetheless, BART has and will continue to coordinate with the communities in the study area for the BART extension on bikeways along the CalTrain and SPTCo rights-of-way. BART permits bicycles on BART trains during off-peak hours or during peak hours in the non-peak directions as long as they are in the end cars and the riders have obtained a permit from BART. BART normally provides bike racks and lockers as part of station development. For additional discussion regarding accommodating bike routes in BART development, please refer to Response 146.1.

- 72.164. On page 3.1-187, Table 3.1-105 [of the DEIR/Technical Appendix], once again based on that suspicious MTC model, seems to be cockamamie....Shouldn’t the 288 San Bruno walk-ins for Alternative V-B drop from Alternative V-A’s 288, particularly since some of those were going to the airport and that does not happen under this scenario?

**Response.** The pedestrians accessing the San Bruno station under Design Option V-A were forecast to exit BART at a location other than the Airport GTC Station. The option of riding the ALRS from the San Bruno station is available in both Design Option V-A and V-B, but is not included in Table 3.1-105, Peak Hour Pedestrian Entries and Exits - 2010, because the ALRS is a separate system from BART.

- 72.165. Why is it that the San Bruno walk-ins drop from 288 for Alternative V-B to 168 under Alternative VI?

**Response.** The decrease in the peak-hour pedestrian entries and exits between Design Option V-B and Alternative VI is due to the location of the station. The alternatives containing a Tanforan Station (LPA, Alternatives III and VI) have approximately the same pedestrian entries and exits. The alternatives analyzed with the San Bruno I-380 Station (Alternatives IV and V and Design Options V-A and V-B) also have approximately the same pedestrian entries and exits, though located higher than with a Tanforan Station, because more residents are within walking distance of the I-380 Station than with the Tanforan Station.

- 72.166. I am not sure about this one but I believe CalTrain, as stated on page 3.1-192 [of the DEIR/Technical Appendix], does not cross Forest Lane anywhere (look at the street signs) nor does the ROW cross Pine formally nor informally. I don't have time to check crossings with Montgomery and Walnut but I question them too.

**Response.** The commentor is correct, Forest Lane and Pine Street do not cross the SPTCo right-of-way. Formal crossings of the tracks occur only at Herman, San Bruno, San Mateo, and Angus Avenues in the City of San Bruno. The text on page 3.1-192 of the DEIR/Technical Appendix, first full paragraph, is revised as follows:

Formal crossing includes ~~Forest Lane~~, Herman Street, ~~Montgomery Avenue~~, San Mateo Avenue, ~~Walnut Street~~, San Bruno Avenue, ~~Pine Street~~ and Angus Avenue.

- 72.167. Are the growth figures shown in Table 3.2-2 correct? Some of the incremental jumps are too implausible to be true.

**Response.** The growth forecasts in Table 3.2-2 come from ABAG and are correct.

- 72.168. On page 3.2-5 [of the DEIR/Technical Appendix], Table 3.2-2, there are no changes in the Sectors universe in any community over 20 years, aye? That means, in San Bruno for example, in 1990 there were 3,712 (30.2 percent of 12,290) retail jobs. Five years later that figure climbed to 3,775, an increase of only 63 retail jobs. That is impossible because Towne Center experienced the opening of entire groups of retail stores to say nothing of Marshall's, CompUSA, three restaurants and, if I am not mistaken, Lucky's....Is the sector data constant over twenty years or is that at a particular point in those two decades?

**Response.** The distribution of employment by sector reflects ABAG's estimate of 1990 employment patterns, and does not show changes over the 20 years.

- 72.169. In the year 2010 this chart shows the airport will have 29,100 jobs, an increase of 8,200 over 20 years. The data on page 3.1-2 was more generous saying there were 33,400 airport jobs in 1990 and that was going to increase 9,000 by the year 2006. What are the real growth figures? How many jobs were there at the airport in 1990? Was it 20,900 or 33,400?

**Response.** The airport employment data in Table 3.2-2 comes from ABAG Projections 94; the data on page 3.1-2 come from the SFIA Master Plan 1989, another source that uses a wider definition of airport jobs, and includes airline personnel who are home-based at SFIA.

- 72.170. On page 3.2-4 the 1990 population for Burlingame is 26,801 but on the following page it grows by 25 to 26,826. At first glance that error may seem insignificant but from 2000 to 2010, Burlingame's population increases by 40 per year.

**Response.** The census data from page 3.2-4 includes only residents of the City of Burlingame, while the ABAG data on page 3.2-5 of the DEIR/Technical Appendix cover the Burlingame sphere of influence, which includes a small unincorporated area adjacent to the city.

- 72.171. On page 3.2-15 [of the DEIR/Technical Appendix], Figure 3.2-4, the Tanforan Shopping Center should be relocated to San Bruno and the "C" at the far right is the national cemetery which is also in San Bruno.

**Response.** The city limits of South San Francisco and San Bruno are not indicated on Figure 3.2-4 of the DEIR/Technical Appendix. Subsequent figures in the DEIR/Technical Appendix, particularly Figure 3.2-5, clearly place the Tanforan Shopping Center and the national cemetery in San Bruno.

- 72.172. On page 3.2-15 [of the DEIR/Technical Appendix], what are those two schools at the far right in San Bruno?

**Response.** The two schools indicated in San Bruno on Figure 3.2-4 of the DEIR/Technical Appendix are the Palo Verde Special School and La Esperanza Special School.

- 72.173. On page 3.2-21 [of the DEIR/Technical Appendix], Figure 3.2-6, Ogden should: 1) return the national cemetery to San Bruno and shade it open space; 2) rebuild the Tanforan Shopping Center where it really is; 3) give back the Fifth Addition's two parks and throw in a free basketball; 4) give the Belle Air its Seventh Avenue park and don't forget the swings; 5) return Posy Park to downtown so it will be cool this summer; 6) rebuild the bank on the vacant lot on El Camino Real south of I-380....

**Response.** Figure 3.2-6 on page 3.2-21 of the DEIR/Technical Appendix is intended to depict the generalized land use pattern in San Bruno and does not purport to be a detailed existing land use map. At the scale of the map (1" = 1200'), it is not possible to illustrate all desired land uses. Accordingly, the parks in the Fifth Addition and Belle Air and Posy Park are not shown.

The National Cemetery is already demarcated with a "C" which is the appropriate symbol, as shown in the legend to the figure; use of an open space symbol as suggested by the commentor would incorrectly define the cemetery. Also, the National Cemetery is shown to be within the San Bruno city limits. The confusion may have been inadvertently created by the arrow that points to the San Bruno/South San Francisco city limit. This boundary is defined as a long line followed by two short dashes. On the figure, this boundary has been covered by another boundary used to show separation among the major land uses. Since the cemetery does not have the major land use boundary around its borders, it may appear that the cemetery is not part of San Bruno.

The "V" indicating vacant land at I-380 and El Camino Real is incorrect, as noted by the commentor. Figure 3.2-6 is revised to replace the "V" with the shading used to denote commercial land uses.

- 72.174. On page 3.2-35 [of the DEIR/Technical Appendix], you say there are no specific proposals for joint development at any of the proposed station sites for any of the alternatives. That seems to infer you do not have an agreement yet with Tanforan Shopping Center....Can the public see the agreement you hammered out with the owners of Tanforan Shopping Center for use of their parking garage? If it does not exist, when do you anticipate consummating it and will the public be able to submit input?

**Response.** There is no agreement for a joint development project between the Tanforan Shopping Center, BART, SamTrans, and the City of San Bruno, since a project has not yet been adopted. At such time as a joint development agreement is presented to the appropriate governing bodies, any required agreement would become public information. Public input would occur prior to or during the governing bodies' consideration and review of an agreement. Consummation of an agreement would occur prior to construction of the Tanforan Station.

72.175.

How much of those \$20 million improvements will be paid by Tanforan?

**Response.** The BART project budget for Tanforan Station includes all costs associated with building the station, associated vehicular access, and parking facilities. Specific financial arrangements would be developed during the course of preliminary engineering once a final station and site development plan has been adopted.

72.176.

Where else in the system has BART entered into a similar agreement with other private parties?

**Response.** BART has numerous joint use and joint development agreements throughout the district administered through BART's Joint Development Department, which is part of the Real Estate Services Department. Joint Development is dedicated solely to managing and developing joint use and joint development of BART property and facilities. Examples of existing and new joint use and joint development opportunities are City of El Cerrito-Del Norte Station, Castro Valley Station; City of Oakland-Fruitvale Station, Center City/12th Station, MacArthur/Broadway Station; City of Hayward-Hayward Station; as well as various agreements along Market Street in downtown San Francisco.

72.177.

Has BART had similar agreements like it has with SamTrans wherein SamTrans will acquire the ROW in San Mateo County with BART money?...Has BART purchased vehicles for other transit companies like it will do here for SamTrans? Where? How many?...Does BART have similar agreements elsewhere in which another entity pays for its operating and maintenance costs?

**Response.** BART is certified by Caltrans as a Local Public Agency qualified to purchase real estate for transit purposes. There are four such agencies in the Bay Area or District 4 of Caltrans - BART, Santa Clara County, Alameda County and Contra Costa County. Therefore, many agencies have contracted with BART to purchase real estate for transit related projects. In previous years BART's designation by Caltrans was restricted to BART related projects.

BART has entered into agreements with the Concord, Contra Costa County and Caltrans to purchase property for BART or transit related facilities. However, BART has not entered into an agreement with SamTrans to acquire property in San Mateo County "with BART money." Both Colma and the proposed SFO Extension Project are being funded with FTA, state, and local matching funds. BART is restricted from spending BART funds outside the BART district, hence the agreement with SamTrans.

BART has not purchased vehicles for ownership by another transit agency. The proposal for this project to acquire 13 40-foot buses for SamTrans is unique and justified by the need for SamTrans to provide feeder bus service to the proposed BART stations. The terms of payment for BART system operating and maintenance costs for SFIA extension services are identified in the BART/SamTrans Comprehensive Agreement, March, 1990.

72.178.

On page 3.2-37 [of the DEIR/Technical Appendix], you state "Except for the holiday season, the parking area that would be displaced by station parking is underutilized." Boy, are you

wrong!...Losing that overflow parking lot to BART will severely impact the quality of life for many San Brunans and visitors to our community.

**Response.** During recent holiday seasons, the lot has been used for Christmas tree sales, not parking.

- 72.179. On page 3.2-39, it states "Employment growth (according to ABAG) is expected to be centered in South San Francisco, San Bruno, and at the SFIA, with approximately 4,000 additional jobs in each of these locations between 1990 and 2010.".... How does ABAG come up with a 20 year growth of 4,500 new jobs in San Bruno? What would the figures be without the SFIA airport extension?...Do Millbrae officials agree with ABAG that a new Intermodal station with all that development in their community will result in less than 600 new jobs over 20 years? Particularly when its two adjacent neighbors, San Bruno and Burlingame will both realize 4,000 new jobs?

**Response.** ABAG's forecasts are based on an extensive analysis of regional demographic and economic conditions. Critical input to the models used by ABAG include local governments' plans, policies, and regulations affecting the use of land. After preliminary numbers are created, they are reviewed by the local governments and modified as appropriate by ABAG. Projections at the regional and county level have a high probability of occurring given current information; sub-county and small area projections are subject to considerable uncertainty. The sub-county forecasts, such as those for San Bruno, are linked to land availability in the commercial and industrial sectors and information about the intensification of land uses and development potential. Forecasts for the SFIA are determined separately from those for San Bruno, and take into consideration the SFIA Master Plan.

With respect to Millbrae and the Millbrae Intermodal Station, ABAG takes into account land availability and local policies with respect to land development. The ABAG forecasts that predict job growth of 600 for Millbrae between 1993 and 2010 were prepared prior to selection of a BART extension that included a BART station. It is conceivable in ABAG's next projection that more employment growth will be assigned to Millbrae due to the proposal for the Millbrae Intermodal Station. When these forecasts are prepared (next official estimates will be Projections '96), they will be reviewed with Millbrae officials who will have the opportunity to comment and modify them as appropriate with local policies.

- 72.180. On page 3.2-39 [of the DEIR/Technical Appendix], when you say the cumulative effect (of 200 new jobs per year) in most project corridor communities "would be beneficial" what dictionary are you using for the word "beneficial?"

**Response.** New jobs create income for households and new expenditures in the community; this is considered to be positive or "beneficial."

- 72.181. On page 3.2-40 [of the DEIR/Technical Appendix], the TSM improvements in San Bruno provide no access from the community to the west of the station....What benefit will San Bruno derive from the TSM?

**Response.** The text should be modified to clarify that access is available from the community to the west of the CalTrain/ALRS San Bruno Station under the TSM Alternative. This contrasts with the 1992 LPA Airport Intermodal Station, where access is not available from the community to the west of the BART/CalTrain/ALRS Airport Intermodal Station. Page 3.2-40, paragraph under Impact 3, sentence two, is revised as follows:

There are few opportunities for intensification or redevelopment within the city jurisdiction, especially since there would be no access from the community to the west of the station.

Deletion of the above phrase from the text on page 3.2-40 does not change the finding that the impact is insignificant.

72.182. On page 3.2-41 [of the DEIR/Technical Appendix], "The new CalTrain station site would include space for approximately 50 parking spaces along Herman Street." Currently the CalTrain station has between 140 and 170 parking spaces straddling the two tracks. That figure is from a personal count and varies because there is a paucity of stall markings....What exactly is the San Bruno CalTrain parking lot capacity at this time?...What will BART do with the other 90 to 120 motorists who will miss the parking spaces currently being provided at the CalTrain station in San Bruno?

**Response.** Please refer to Response 72.34 for a discussion of the number of parking spaces at the CalTrain San Bruno Station under the TSM Alternative.

72.183. On page 3.2-44 [of the DEIR/Technical Appendix], we read about elevated tracks 32 feet above grade rising above the city entry points at San Bruno Avenue and San Mateo Avenue, as well as above homes on First Avenue....Where are the mitigating factors for this unconscionable atrocity?...What is San Bruno's benefit from this aerial railroad? Why should we be happy that every five minutes during the rush hours, we will be able to look up at the underbelly of ten-car BART trains and listen to the horns as they warn of their entrance into the station?

**Response.** The commentor is referring to Impact 8 of the Base Case Alternative on page 3.2-44. This impact addresses the consistency of the proposed BART extension with the City of San Bruno's General Plan policies. It is explained earlier in the section on page 3.2-35 that BART is not required to comply with local building regulations, and therefore a declaration of significance and necessary mitigation measure are not provided in the document. Nevertheless, the Base Case Alternative does result in significant physical and environmental impacts, including fragmentation of the city and introduction of a highly visible physical barrier. Impact 3 on page 3.2-91 and Impact 15 on page 3.3-55 discuss these impacts, respectively. The DEIR/Technical Appendix notes that the identified mitigation measures would be insufficient to reduce the impacts to an insignificant level.

This alternative is presented because it was formulated during the AA/DEIS/DEIR process as a lower cost alternative. The purpose of CEQA and NEPA is to present the project and to identify the likely significant adverse effects. There are no guarantees or expectations that everyone or even a majority of those examining the alternatives will be happy with them. In fact, one of the purposes of the public review process is to solicit the public's comments on the merits of the project alternatives and their preferences. The public's support or opposition to a particular alternative is to be carefully considered by the BART and SamTrans boards as they deliberate on the selection of an LPA.

72.184. Every time a ten-car BART train passes by right outside a Belle Air residential window, won't it leave a minute residue from its contact with the rails? If so, what happens to that residue?....What mitigation measures are available to prevent the contamination generated by wearing wheels and wearing rails from harming us?

**Response.** Under all BART build alternatives except the Base Case Alternative, BART would be either in a below-grade retained-cut or covered subway alignment adjacent to the Belle Air

neighborhood. Under the Base Case Alternative, BART would be in an aerial alignment adjacent to the Belle Air neighborhood. Furthermore, as indicated in Response 72.185, there is no evidence that steel particles from wheel and rail wear are a health hazard. Please refer to Response 72.185 for a more detailed discussion of potential impacts from wheel and rail wear.

- 72.185. There appears to be a health hazard with minute steel filings blowing off the elevated tracks and being inhaled by neighboring residents.

**Response.** Wear occurs on all railroads, and is generally caused by slipping at the contact surfaces between the steel wheels and the steel rails. Slipping is caused by curves in the track, variations in the diameter of wheels on the same axle, contact of the wheel flanges against the rails, and by spinning or sliding that occurs during braking. This wheel and track wear is very gradual, however, and is of insufficient magnitude to produce any significant amount of airborne particulate matter. For this reason, there are no health standards that address the issue of wear from railroad tracks (other than the generally-applicable federal and California ambient air quality standards for particulate matter). BART has a particularly low rate of wheel wear due to its relatively light vehicle weight and relatively conservative track curvature. There have been no reported instances of adverse health effects related to the inhalation of steel particles in more than 20 years of BART operation.

- 72.186. On page 3.2-46 [of the DEIR/Technical Appendix], [Impact] 7, "The elimination of existing land uses on both sides of San Bruno Avenue under Alternative IV would conflict with Commercial Land Use Policy 4, which supports upgrading commercial and office structures along streets such as San Bruno Avenue...". So what is your preferred mitigation? There is none.

**Response.** Please refer to paragraph two on page 3.2-35 of the DEIR/Technical Appendix, which explains why BART is not required to mitigate inconsistencies with local building regulations.

- 72.187. On page 3.2-47 [of the DEIR/Technical Appendix], the impacts from loss of school revenues, jobs, and tax revenues "would remain significant because there are no feasible mitigation measures." One time, for a San Bruno City Council meeting I counted the times BART impacts had no mitigation measures and I had 31 in sections 2.4 and 2.5....San Bruno pays a humongous price for many of these alternatives and BART's response is simply "There is nothing we can do about it." Unconscionable is too soft a term for this attitude.

**Response.** CEQA and NEPA have several purposes, including informing the public about potential significant environmental effects of proposed activities; preventing significant avoidable damage to the environment by requiring changes in the project through use of alternatives or mitigation measures, when found to be feasible; and identifying the ways that environmental damage can be avoided or significantly reduced. The environmental documentation for the project serves this stated purpose and undertakes to make mitigation commitments, wherever possible, for a range of potential impacts. Not all impacts are feasibly mitigable.

- 72.188. How did BART compensate for the fact that minority families in the impacted neighborhoods have larger household numbers than San Bruno's municipal average? The number of residents being displaced throughout the DEIS/DEIR are underestimated because of the large number of minority families being affected.

**Response.** As stated on page 3.2-56 of the DEIR/Technical Appendix, the estimated number of residents to be displaced was based on the average household size for each city. The actual number may be higher or lower.

72.189. On page 3.2-63 [of the DEIR/Technical Appendix], where are all these "sufficient resources" in the communities in which the displacement would take place? We are talking about overcrowding among low income residents here. We live on this side of the tracks because this is where housing that is affordable to us is located. If BART takes away the location, where are we going to move, further East?

**Response.** As noted in the DEIR/SDEIS, preliminary findings indicate that there are sufficient resources in the communities in which the displacement would take place, or in the adjacent communities, to house those residents who would be displaced, i.e., Daly City, South San Francisco, San Bruno, and Redwood City.

During preliminary engineering, Housing Valuation Studies will be performed for any residential relocation and will consider the type and availability of replacement housing. The studies will determine whether rental differential or purchase differential payments are necessary. These payments are not taxable and are based on studies of comparable "equal to or better than" replacement dwellings. All potential replacement dwellings will be determined to be "decent, safe and sanitary" before consideration. A displacee may move or relocate for up to 50 miles from their original location and be eligible for relocation assistance benefits. Payments will be made as lump sums once all administrative steps are complete.

72.190. On page 3.2-63 [of the DEIR/Technical Appendix], [Impact] 1, "85 percent of the Seventh and Walnut Park would be displaced."... "Relocating the parks into a new area of the city would have its own impacts that cannot be quantified at this time."....So what are we going to do, BART? When will we know if the park can be relocated? When will you share with us the impacts it will have if moved to a new area of the city?...When you provide the information requested immediately before this will we be able to comment on the plan?

**Response.** As noted on page 5-11 of the DEIR/Technical Appendix, the City of San Bruno Parks Director questioned the feasibility of finding a suitable replacement site for 7th Avenue and Walnut Park, although he did present the adjacent flood control basin as a potential relocation site. Based on further evaluation, there appear to be no feasible sites for relocating the park. Therefore, the last three sentences of the last paragraph on page 3.2-63 of the DEIR/Technical Appendix are revised as follows:

Compliance with all of the state and federal laws that apply to displacement of parks would partially mitigate this impact. However, the park cannot be replaced; the impact would remain significant and unavoidable. Relocating the parks into a new area of the city would have its own impacts that cannot be quantified at this time.

The Alternative VI Aerial Design Option, which was selected by the BART and SamTrans boards as the LPA in November 1995, would not require use or relocation of the 7th and Walnut Park, either temporarily or permanently.

72.191. On page 3.2-70 [of the DEIR/Technical Appendix], Figure 3.2-14 is different from the area shown in the drawings. For one thing, the drawings show the alignment meeting San Bruno Avenue right at Third Avenue but this alignment shows it running pretty close to San Bruno Avenue from Third to Fifth.

**Response.** The plans in the Design Appendix are more accurate than those in the DEIR/Technical Appendix. Figure 3.2-14 in the DEIR/Technical Appendix shows the general area of displacement.

- 72.192. What do you tell someone who lives on Walnut between Second and Third? Are you or are you not going to take their property? If Alternative IV is selected what will you tell those Third Avenue residents when you knock on their doors to buy them out and they show you the drawing that clearly showed they were in the clear?

**Response.** The shading on Figure 3.2-14 in the DEIR/Technical Appendix includes the block bounded by San Bruno, Second and Third Avenues and Walnut Street because that is the general area in which displacement might occur. If Alternative IV is chosen, the plans will be further refined and the exact limits of acquisition will be determined.

Adoption of the project's EIR/EIS by the FTA and both BART and SamTrans boards of Directors will signal notification to property owners, businesses and renters along the adopted alignment of proposed displacement. A notice of intent to acquire must be sent to each owner of property to be acquired as a result of the project at least 90 days prior to relocation. Additionally, the law requires that a Final Relocation Plan be conducted by BART prior to commencement of any relocations. (Please refer to Volume V, Technical Appendices of this FEIR/FEIS.)

- 72.193. I vehemently oppose the LPA because it fragments and disrupts the Fifth Addition "physically dividing a neighborhood already fragmented."

**Response.** The commentor's opposition to the proposed project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process). As noted by the commentor (and as discussed on page 3.2-24 of the Summary DEIR/SDEIS), the Fifth Addition would be physically divided by the Alternative VI Aerial Design Option.

- 72.194. On page S-15 of the Summary of the DEIS/DEIR it clearly proclaims "For every significant adverse impact identified in the DEIS/DEIR, mitigation measures are proposed to reduce or eliminate the effects."

**Response.** Under CEQA and NEPA, proposed mitigation measures must be "feasible," taking into account economic, environmental, legal, social and technological factors. As stated on page 3-4 of the DEIR/Technical Appendix, if the mitigation measures would not minimize an effect to an insignificant level, the effect is classified as an "unavoidable significant" impact. Following the statement cited by the commentor, the Executive Summary also states that in some instances, "the proposed mitigation measure will not reduce the impact to an insignificant level. In these cases, the impact remains significant and is said to be "unavoidable." The DEIR/SDEIS clearly identifies those unavoidable, significant impacts that would result from the BART extension.

- 72.195. I wish to go on the record as opposing Alternative VI based on the many negative impacts it will have on the Fifth Addition.

**Response.** The commentor's opposition to the LPA is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).

- 72.196. On page 3.3-13 [of the DEIR/Technical Appendix], that reference to Summerfield Suites should be in San Bruno.

**Response.** The hotel is near the San Bruno - South San Francisco boundary, but within the City of San Bruno. Page 3.3-13, last bulleted item of the DEIR/Technical Appendix is deleted:

~~Summerfield Suites, four-story hotel — Huntington Avenue between Sneath Lane and Noor Avenue; 130 feet. (A view toward the project corridor from the hotel is shown in Figure 3.3-5, Photo 11.)~~

Insert the following on page 3.3-18, incomplete paragraph, following the last sentence of the DEIR/Technical Appendix:

Huntington Avenue between Sneath Lane and Noor Avenue is 130 feet from the proposed centerline of the BART tracks under all BART build alternatives. (A view from the hall toward industrial land uses in South San Francisco is shown in Photo 11 of Figure 3.3-3.)

Page 3.3-35 of the DEIR/Technical Appendix is revised as follows under Impact 10, second paragraph, second sentence:

The nearest sensitive receptor is the Summerfield Suites Hotel in ~~South San Francisco~~ San Bruno.

72.197. On page 3.3-14 [of the DEIR/Technical Appendix], the built environment in San Bruno should include Towne Center, I believe. Costco does not really have a low-profile and it is a puzzle as to how BART could miss the entire center.

**Response.** The built environment discussion was intended to be general and the specific references to large-scale buildings were not all inclusive. The Towne Center is a major land use and contributor to the visual setting. Page 3.3-14 of the DEIR/Technical Appendix, paragraph five, sentence two is revised as follows:

Exceptions include the large-scale, mid-rise Tanforan Park Shopping Center, ~~the Towne Center shopping complex~~, the I-380 viaduct, and SFIA-related facilities east of Highway 101.

72.198. On page 3.3-14 [of the DEIR/Technical Appendix], you note there are small-lot homes along Huntington Avenue at the common border of San Bruno and South San Francisco. That is interesting.

**Response.** The description of the built environment in the DEIR/Technical Appendix is intended to be general and capture the predominant land uses within the project corridor. To be more accurate, the text on page 3.3-14, last paragraph, is revised to read:

At the common border of San Bruno and South San Francisco, large commercial ~~and industrial buildings and small-lot homes along Huntington Avenue~~ comprise the built environment in the project corridor ~~west of the SPTCo tracks, and small-lot homes of the Fifth Addition neighborhood define the corridor east of the tracks.~~

72.199. On page 3.3-15 [of the DEIR/Technical Appendix], the Belle Air neighborhood does not contrast well with the Tanforan Shopping Center because it is not even within a stone's throw of the complex.

**Response.** The DEIR/Technical Appendix states on page 3.3-15 that the low-rise single family residential neighborhoods east of Huntington Avenue contrast with the Tanforan Shopping Center. The text does not report whether the land uses contrast well or that they are seen in context with one another. The statement simply describes the contrast that exists within the built environment.

- 72.200. On page 3.3-15 [of the DEIR/Technical Appendix], Huntington Avenue, between Pine and the Southern City limits, does not have multi-family and commercial units on both sides. The only structures, honest, on the East side, the length of Huntington Avenue in San Bruno, is the Auto rental agency at San Bruno Avenue. The rest of it is parking and/or railroad tracks.

**Response.** The description of the built environment is intended to be general and to capture the predominant land uses within the project corridor. The text on page 3.3-15, paragraph three, sentence one of the DEIR/Technical Appendix is revised as follows to more correctly characterize the predominant land uses:

Huntington Avenue between Pine Street and the southern city limits ~~south of the Central Business District to Lomita Park~~ contains predominantly low-rise ~~residential uses on its west side and the CalTrain corridor on its east side;~~ multi-family and commercial units ~~on both sides of the project corridor.~~

- 72.201. On page 3.3-16 [of the DEIR/Technical Appendix], Photo 13 shows a home on Third Avenue and it is facing West.

**Response.** The text describing Photo 13 on Page 3.3-16 of the DEIR/Technical Appendix is revised as follows:

Belle Air Neighborhood Home on Third Avenue Street, North of Angus Avenue Facing West North.

- 72.202. On page 3.3-18 [of the DEIR/Technical Appendix], a couple parks you seem to have overlooked are the Bayshore and Herman Tot Lot in the Fifth Addition. Both are crucial laydown areas for you under Alternative VI and one is slated for significant impacts under another alternative.

**Response.** The commentor is correct that Bayshore Circle Park and Herman Tot Lot were left out of the list of parks in San Bruno on page 3.3-18 of the DEIR/Technical Appendix. These parks are addressed in detail in Chapter 5, Section 4(f) Evaluation. The DEIR/Technical Appendix is revised on page 3.3-18, paragraph two, sentence one as follows:

Parks in San Bruno in the vicinity of the project corridor include ~~the Bayshore Circle Park, Herman Tot Lot, both in the Fifth Addition neighborhood~~: the 7th and Walnut Park....

- 72.203. On page 3.3-18 [of the DEIR/Technical Appendix], is there a reason why BART completely ignores Angus Avenue? It is one of the busiest East-West arteries all day long.

**Response.** Main travel routes in San Bruno that would likely be affected by the project alignment and/or stations were defined. Although Angus Avenue is a busy street, it is not as heavily trafficked as other streets in the vicinity of the alignments or stations, i.e., Huntington, San Bruno, San Mateo, and San Antonio Avenues. Please refer to Figures 3.1-4 and 3.1-5 which show existing A.M. and P.M. hour volumes, respectively.

- 72.204. On page 3.3-18 [of the DEIR/Technical Appendix], that reference to Photo 19, allegedly along Huntington Avenue shows a picture that is currently located on Walnut Street.

**Response.** The description of Photo 19 falls on page 3.3-17 of the DEIR/Technical Appendix and accurately states that the photo is of the streetscape along Walnut Street. The reference to Photo 19 on page 3.3-18 of the DEIR/Technical Appendix, paragraph 3, is revised as follows:

Mature trees and well-manicured yards are characteristic of the streetscape in the Belle Air neighborhood ~~along east~~ of Huntington Avenue in San Bruno (Figure 3.3-4, Photo 19).

- 72.205. On page 3.3-18 of the DEIR/Technical Appendix, on San Mateo Avenue you again neglect to mention Posy Park, one of the smallest but also one of the coolest parks in the entire project corridor.

**Response.** The description of streetscape is intended to be general. Including a description of Posy Park or other specific uses would represent a more specific level of detail than described for other streets. Posy Park is recognized as a sensitive receptor on page 3.3-18, paragraph one of the DEIR/Technical Appendix.

- 72.206. On page 3.3-35 [of the DEIR/Technical Appendix], [Impact] 10, the Tanforan Station would indeed be located within 60 feet of a sensitive receptor. See page 3.3-37, Figure 3.3-8 and page 3.3-39, No. 12.

**Response.** Impact 10 on page 3.3-35 of the DEIR/Technical Appendix states that there are no sensitive receptors near the Tanforan Station, whereas Impact 12 on page 3.3-39 states that there are sensitive receptors within 60 feet. The distinct but subtle difference is that Impact 10 addresses potential impacts in South San Francisco, where there are no sensitive receptors, while Impact 12 addresses potential impacts in San Bruno, where nearby sensitive receptors include residences in the Fifth Addition.

- 72.207. On page 3.3-36 [of the DEIR/Technical Appendix], it sounds like we may have another PG&E distribution line from the Airport Main Substation east of Highway 101 to supply the BART traction power system extended overhead in San Bruno....What is the path of this overhead line? Does it go any further west than the center line of Seventh Avenue?...How much current will this one line carry?...What contingencies will BART plan into the system in case an earthquake renders the line inoperative?

**Response.** The Airport Main Substation is located west of Highway 101 approximately one-quarter of a mile south of San Bruno Avenue. Current plans for the PG&E distribution line from the Airport Main Substation to the BART traction power substation include an underground line as described in page 2-20 of the DEIR/Technical Appendix. The underground feeder line, as described for the proposed project, would follow the north substation access road to the corner of 7th and Angus Avenues, then proceed on 7th Avenue to the proposed traction power substation in the area. The load current in the feeder line depends upon the system operating conditions dictated by the number of trains in the area. Under normal operating conditions, the current is expected to be in the order of 200 Amperes. Under emergency conditions, with the feeder line out of service for whatever reasons, power to the BART system will be sustained from other power sources from PG&E in a number of locations over the entire system.

72.208. BART absolutely cannot bring overhead power lines into San Bruno and jeopardize our health. If indeed you must come through town then you darn well better bury your extension cords underground.

**Response.** PG&E power lines that would supply BART with traction power would be installed underground as discussed on page 2-20 of the DEIR/Technical Appendix.

72.209. On page 3.3-36 [of the DEIR/Technical Appendix], what are the dimensions on that ventilation building with a 25-foot tower?

**Response.** The dimensions of the ventilation building are shown on page 141, Figure 3 of the Design Appendix.

72.210. On page 3.3-39 [of the DEIR/Technical Appendix], that 550 feet of surface track is more like 200 feet.

**Response.** The reference to 550 feet of surface track on page 3.3-39 of the DEIR/Technical Appendix refers to the distance between the city limits along Tanforan Avenue and the beginning of the retained cut segment. This section includes a portion of the Tanforan Station platform and an at-grade section. To be more precise, the first sentence of Impact 12 is revised as follows:

The proposed Tanforan Station platform and ~~475 feet of at-grade tracks~~ 550 feet of surface ~~track~~ would be constructed....

72.211. On page 3.3-9 [of the DEIR/Technical Appendix], No. 12, "The BART trains and protective fencing would visually detract from the streetscape along Bayshore Avenue." I am not sure BART trains really go down Bayshore Avenue, do they?

**Response.** The commentor is referring to page 3.3-39 of the DEIR/Technical Appendix rather than 3.3-9. Although BART trains would not run down Bayshore Avenue, the street is immediately east of the BART right-of-way along the San Bruno branch of the SPTCo corridor. Since this stretch of the proposed project would be at grade, the trains and security fencing would be visible and would alter the streetscape of Bayshore Avenue.

72.212. No matter where you place your tracks in the project corridor you cannot use this [regulation BART] fencing and expect our children to stay off your tracks.

**Response.** Please refer to Responses 21.10, 21.15, and 22.15 for a discussion of safety measures to be incorporated during construction.

72.213. How long does it take your recommended landscaping to mature and cover your unsightly fences?...How long does it take for your proposed replacement trees on San Antonio Avenue to provide a visual buffer? The same goes on Third and Angus for your plans to cover up the parking garage under Alternative V-B. On page 3.3-65, your artists' concept for covering up that parking garage with trees is not at all impressive.

**Response.** Landscaping recommended in various mitigation measures would mature at different rates depending on the quality of the site (including soil and drainage), species of tree, and weather conditions. BART will preserve existing vegetation whenever possible. Landscaping to match existing conditions would be pursued where appropriate; however, for purposes of establishing

buffers, the focus will be on selecting plants that could quickly provide for the intended purpose. Depending on the circumstances tree foliage typically requires about five years to densify and become an effective visual barrier.

- 72.214. On page 3.3-40 [of the DEIR/Technical Appendix], No. 15, the views from higher elevation in San Bruno toward the SFIA property are "Distant and largely screened by existing development and vegetation." You ought to drive up there some clear evening then you will want to rewrite this paragraph....Honest, the view is one worth making the trip...to see....

**Response.** The commentor is suggesting that the DEIR/Technical Appendix characterization of higher elevation views from San Bruno is inaccurate. A number of site visits were conducted in preparing the visual assessment, and the current characterization of views is accurate.

- 72.215. On page 3.3-56 [of the DEIR/Technical Appendix], BART's design of the aerial guideway and support columns "will be visually compatible with the city entrance in terms of material, color, form and texture."...Where is your artist's rendition of this "enhancement" of San Bruno Entryway?

**Response.** Mitigation Measure 15.1, to which the commentor is referring, is a recommendation, and is intended to provide a guideline for design. Its objective is to match the city's design treatment as much as possible. Descriptions of mitigation measures, including that raised by the commentor, are straightforward and were not deemed to warrant photomontages or an artist's renditions.

- 72.216. By the way, how many of these beautiful columns can we expect to see in the various aerial scenarios?...How often will you be doubling up on "bents" to hold up one track each?

**Response.** The standard spacing for columns in BART aerial structures is 80 feet from center of column to center of column. When the need arises, BART would increase this spacing, as was done at the route just north of the Daly City Station, or use a column for each series of girders. These decisions will be made during preliminary design.

- 72.217. Why create a "well-designed, attractive plaza at the San Mateo Avenue and San Bruno Avenue intersection" if the "drop-off/pick-up area would discourage pedestrian activity?"...That "attractive plaza" appears to be 200 feet away and across the tracks and San Bruno Avenue?

**Response.** The commentor is referring to the first paragraph on page 3.3-77 of the DEIR/Technical Appendix, which concerns the I-380/San Bruno Station option under Alternative V. Although the drop-off/pick-up area would discourage pedestrian activity, this effect may be offset by creating an attractive plaza at San Bruno/San Mateo Avenues that has the potential to stimulate pedestrian activity and has the added benefit of supporting the city's goal to create a visual amenity at this city's entryway.

- 72.218. On page 3.3-77 [of the DEIR/Technical Appendix], [Mitigation Measure] 11.1, why do you want to protect the homes on the West side of Huntington when in the Design Appendix, Page 115 you take them all out?

**Response.** The commentor is referring to Mitigation Measure 11.2, i.e., Huntington Avenue streetscape enhancement, on page 3.3-77 of the DEIR/Technical Appendix rather than 11.1, i.e., San Mateo Avenue streetscape enhancement. Mitigation Measure 11.2 is intended to protect the homes west of Huntington Avenue that front onto Mills Avenue. These homes back up to the

homes currently fronting Huntington Avenue that would be displaced for the I-380/San Bruno Station under Alternative V. Only the row fronting Huntington Avenue would be displaced.

To clarify the intent of this measure, the first sentence of Mitigation Measure 11.2 on page 3.3-77 of the DEIR/Technical Appendix is revised to read:

BART will provide extensive landscaping along the western edge of the widened Huntington Avenue to protect homes ~~on the west side~~ of the street....

- 72.219. On page 3.3-77 [of the DEIR/Technical Appendix], [Mitigation Measure] 11.3, when BART creates a landscaped plaza station entry where will you be locating that ten-foot ventilation shaft that you show in the Design Appendix?

**Response.** The vent shaft at the end of the BART platform would be located west of the CalTrain tracks. The landscape plaza station entry, proposed under Mitigation Measure 11.3, would be situated east of the CalTrain tracks along the San Mateo Avenue. The vent shaft would not interfere with proposals to create a plaza.

- 72.220. On page 3.3-78 [of the DEIR/Technical Appendix], who will be employed to staff the information kiosks and who will be signing their checks?

**Response.** Depending on negotiations with the City of San Bruno, information kiosks may be unstaffed and serve as a bulletin posting area. If the city chooses to use the kiosk to announce city events, meetings, or other information, the city may provide their own staff.

- 72.221. What kind of “special paving treatment” could ever help create an appealing entry to San Bruno?

**Response.** The commentor is referring to Mitigation Measure 11.3 on page 3.3-77 of the DEIR/Technical Appendix. This measure contains a number of components intended to contribute to the enhancement of the I-380/San Bruno Station entry. Special paving alone would not create an appealing entry, but when combined with benches, plantings, trees, and concessions, the station entry would be more inviting. Special paving may consist of patterned brick work or textured concrete.

- 72.222. On page 3.3-81 [of the DEIR/Technical Appendix], what kind of “anchor” are you going to have at the end of the corridor where Posy Park is already situated with mature trees?

**Response.** The commentor is referring to Mitigation Measure 12.2, i.e., Downtown San Bruno Station parking garage design, on page 3.3-81 of the DEIR/Technical Appendix. An architectural or landscaped anchor is intended to be a focal point or a destination that offers visual orientation. It may contain benches or other seating and attractive landscaping. The anchor would help replace Posy Park, which would be displaced under Alternative V with the Downtown San Bruno Station option.

- 72.223. Why would you want to encourage “pedestrians to walk to the end of the street” away from the businesses of San Mateo Avenue?

**Response.** The commentor is referring to Mitigation Measure 12.2, i.e., preservation of San Mateo Avenue streetscape on page 3.3-78 of the DEIR/Technical Appendix. The intent of this

measure is not to draw pedestrians away from businesses on San Mateo Avenue, but rather to encourage pedestrian movement toward the Downtown San Bruno Station.

- 72.224. On page 3.3-81 [of the DEIR/Technical Appendix], [Mitigation Measure] 12.3, i.e., lighting fixtures, notes that the upper level of the parking garage will be set back from the Third Avenue facade yet the drawings at Figure 5.2 show there are 675 stalls on each level.

**Response.** The commentor is referring to Figure 5.2 on page 121 of the Design Appendix. The drawing shown in the Design Appendix is conceptual and the final layout will be determined in consultation with the City of San Bruno during preliminary design. Mitigation Measure 12.3 on page 3.3-81 of the DEIR/Technical Appendix is recommended to minimize scale incompatibilities that would occur with the conceptual layout. Implementation of this measure may reduce the total number of parking spaces. However, reconfiguring the spaces could preserve those lost due to the upper level setback.

- 72.225. On page 3.3-81 [of the DEIR/Technical Appendix], [Mitigation Measure] 12.4 BART will "shield lights in the parking structure and surface lots to minimize spillover onto adjacent properties" but will do nothing about the lights in the passing ALRS?

**Response.** The ALRS does not travel through San Bruno under Alternative V. The ALRS would travel to the SFIA from the Millbrae Intermodal Station at Center Street and run along the east side of Highway 101. The only light that the ALRS would generate would come from the rail car interior, and would be similar to light generated from within a BART car. This light is not expected to be bright enough to generate glare, and since it would not be direct light, no impacts would occur.

- 72.226. On page 3.3-83 [of the DEIR/Technical Appendix], are you adding only a third level to the downtown San Bruno Intermodal Station or a fourth as shown on the Design Appendix, Page 121?

**Response.** Page 3.3-83 of the DEIR/Technical Appendix, second bulleted item, is amended as follows:

Addition of a ~~fourth~~ third level to the I-380 San Bruno Intermodal Station structure (impacts would be the same as those identified for Alternative V; an additional level would not add measurably to the already significant effect);

Similarly, page 3.3-83 of the DEIR/Technical Appendix, third bulleted item, is amended as follows:

Addition of a ~~third~~ fourth level to the Downtown San Bruno Intermodal Station parking structure (impacts would be the same as those identified for Alternative V; an additional level would not add measurably to the already significant effect);

- 72.227. On page 3.3-92 [of the DEIR/Technical Appendix], Table 3.3-1, there should be no sensitive receptors in Millbrae under Alternative V-A and Alternative V-B because on page 3.3-93, it says "no stations are proposed in Millbrae."

**Response.** The DEIR/Technical Appendix, page 3.3-92, Table 3.3-1, is amended as follows:

**Table 3.3-1**  
**Comparison of Visual Impacts by Alternative**

Proposed Project	I-380 Least - Cost Design Option	Alternative II TSM		Alternative III Base Case		Alternative IV Airport Aerial East of Hwy 101	Alternative V Min. Length Subway to Millbrae	Design Option V-A	Design Option V-B	Design Option V-C	Alternative VI Millbrae Avenue via International Airport Terminal
		Base	Case	Aerial	Length	Subway to GTC	Length	Subway to San Bruno	Length	Subway to GTC	Length
<b>MILLBRAE</b>											
Built Env.	5	5	5	5	4,5	4,5	5	5	5	4	
Significant Views/Scenic Resources	1,5	1,5	5	1,5	4,5	4,5	5	5	5	0	
Sensitive Receptors	0	0	0	0	1,4	1,4	1,4	1,4	1,4	4	
Streetscape	0	0	0	0	0	0	0	0	0	0	

- 72.228. Regardless of which option is selected, these buildings [601-605 San Mateo Avenue, 609-617 San Mateo Avenue, and the American Legion Post 409 at 757 Huntington Avenue] and this bridge [Arched-Stone Cut Bridge] must be saved.

**Response.** None of the three buildings identified by the commentor would be physically impacted beyond the construction period by any of the BART build alternatives (in other words, the physical integrity of these buildings would be unaffected in the long term). However, the physical setting of the commercial buildings at 601-605 and 609-617 San Mateo Avenue would be significantly altered under Alternative V and Design Options V-A and V-B and the physical environment of the American Legion Post would be significantly disturbed under the Base Case Alternative, Alternative V, and Design Options V-A and V-B.

- 72.229. On page 3.4-33 [of the DEIR/Technical Appendix]. [Impact] 2, "Alternative VI could have a long-term effect on a large shell midden known to have existed along Colma Creek." Unfortunately BART is silent on possible mitigation measures.

**Response.** The text on page 3.4-15 of the DEIR/Technical Appendix under Impact 2 should have been repeated on page 3.4-33 under Impact 2. Please also refer to Response 16.3 for a discussion of potential impacts and mitigations to the shell midden and other subsurface archaeological remains.

- 72.230. On page 3.5-1 [of the DEIR/Technical Appendix], the San Bruno Police Department has 50 sworn officers, not the 47 you show here. To your credit, the remainder of the information was correct as of 13 February 1995.

**Response.** The DEIR/Technical Appendix, page 3.5-1, paragraph five, sentence two, is amended as follows:

The department employs ~~47~~ 50 sworn officers and 12 volunteer reserves on three shifts and three patrol beats, and uses 13 squad cars and two canines.

- 72.231. On page 3.5-3 [of the DEIR/Technical Appendix], you note that the Millbrae Police Department employs 23 sworn officers. On March 6th "a police officer and a community service officer will join the Police Department's staff of 25 by October 1." Granted, you could not know they were adding two in October but they already have two more than you reported on 13 January 1995.

**Response.** In the DEIR/Technical Appendix, page 3.5-3, paragraph one, sentence one, is amended as follows:

The Millbrae Police Department, at 621 Magnolia Street, employs ~~23~~ 25 sworn officers and has seven volunteer reserves and ten squad cars.

- 72.232. On page 3.5-2 [of the DEIR/Technical Appendix], Figure 3.5.1a,...all of the Colma and all of the San Bruno and all of the Millbrae emergency services are located to the West of the project corridor. Your construction will definitely impact their accessibility to any emergencies on my side of the tracks. I pray your mitigation measures will not endanger us.

**Response.** Access by emergency vehicles to the east side of the tracks, as well as to other locations throughout the project corridor, will be planned and coordinated with local jurisdictions and service providers during the construction planning process. The DEIR/Technical Appendix, nevertheless, acknowledges on page 3.13-96 that there would still be delays during construction and that the impact would remain potentially significant.

- 72.233. On page 3.6-9 [of the DEIR/Technical Appendix], when discussing the San Bruno Fault, you mention that it is shown in Figure 3.6-2 when I think you meant Figure 3.6-2a.

**Response.** Page 3.6-9 DEIR/Technical Appendix, paragraph three, sentence three is amended as follows:

The location mapped by Bonilla intercepts the project corridor in three locations, as shown in Figure 3.6-2 Figure 3.6-2a.

- 72.234. On page 3.6-9 [of the DEIR/Technical Appendix], you note that the San Bruno fault, "is purely inferred and no evidence has been uncovered to show that fault has been active in the past 1.7 million years." I was almost ready to feel good but then I looked at Figure 3.6-3 and found that this fault is really a "concealed fault trace." Well is it or isn't it?

**Response.** The narrative on page 3.6-9 of the DEIR/Technical Appendix is correct in referring to the San Bruno Fault as a hypothetical (inferred) fault. Figure 3.6-3 incorrectly indicates a concealed fault trace and is corrected to instead indicate an inferred fault trace.

- 72.235. On page 3.6-8 [of the DEIR/Technical Appendix], our Bay Mud deposits "extend just West of Highway 101 to the SFIA and below San Francisco Bay." BART, take a moment and look at Figure 3.6-2a. Do you see that "Qm" located between the words "Downtown San Bruno" and

"Airport LTP?" Do you see how "just West of Highway 101" crosses the San Bruno Fault and goes all the way to Second Avenue?

**Response.** Page 3.6-8 paragraph one, first sentence is revised as follows:

Within the project corridor, Bay Mud deposits extend from the San Bruno Fault at approximately 2nd Avenue just west of Highway 101 to the SFIA and below the San Francisco Bay.

- 72.236. Why should we in the project corridor believe you when you say "Adherence to BART design criteria would reduce this impact to an insignificant level."...BART will have to do much better than this to persuade the public that you will be a safe form of transit and a safe neighbor in time of earthquakes.

**Response.** All significant environmental impacts concerning geology, soils and seismicity have been assessed and appropriate mitigation measures are proposed. During the final engineering phase, site-specific geological and geophysical studies will be conducted and the final project design may be refined to incorporate this data. Please also refer also to Response 207.5.

- 72.237. On page 3.7-23 [of the DEIR/Technical Appendix, Picture 2], apparently that view is not facing Northeast. I believe it is East and I base that on personal observation on the scene and the shadows in the photo itself. The arrow on page 3.7-22 shows it to be Southeast.

**Response.** The photo is not facing northeast as indicated in photo number two on page 3.7-23, but rather southeast as correctly depicted in Figure 3.7-3. Page 3.7-23 of the DEIR/Technical Appendix, Photo 2 legend, is revised as follows:

Chestnut Station site, Colma Creek and Spur Track from Kaiser 4th floor parking structure, facing Northeast Southeast.

- 72.238. On page 3.7-34 [of the DEIR/Technical Appendix], [Impact] 4, "Cupid Row Canal would have to be redirected to the East where it passes under San Bruno Avenue." I believe it is already directed to the East at San Bruno Avenue.

**Response.** The DEIR/Technical Appendix on page 3.7-34, paragraph two, sentence two is revised as follows:

Cupid Row Canal would have to be redirected further to the East where it passes under San Bruno Avenue.

- 72.239. On page 3.7-34 [of the DEIR/Technical Appendix], "The only way to avoid these impacts would be to relocate the proposed track alignment approved by all the other BART build alternatives or adoption of the TSM and No Project alternatives."...The statement immediately above is incorrect in that I do not think Alternative V-B actually impacts the wetlands very much.

**Response.** Although the impacts from Design Option V-B to Cupid Row Canal would be less under Design Option V-B than under the proposed project, Design Option V-B would not "avoid" impacting this canal altogether.

72.240. Can BART acquire this property [West of Bayshore]? I thought it was only SamTrans who could make any acquisitions along the project corridor....Have there been any discussions yet with the Airport that leads BART to believe BART might fail to acquire the needed land?...Have costs for this acquisition already been factored into the ROW figures showing in Chapter 6?...Is there any possibility of learning how much this particular parcel is expected to cost BART/SamTrans?...Where is the "offsite mitigation location" that you propose as a backup?

**Response.** Purchase of the west of Bayshore parcel from the SFIA by BART is no longer considered requisite. BART, the SFIA and USFWS have developed and agreed upon a mitigation program for habitat enhancement measures on the west of Bayshore parcel. The entire mitigation program also includes the purchase and presentation of offsite mitigation site(s) (i.e., Steel Ranch, a 244 acre parcel of land in the southwestern portion of San Mateo County where there is an existing SFGS population, and other sites). All mitigation measures are identified in the Biological Assessment and Biological Opinion in Volume V of this FEIR/FEIS.

Please refer to Response 41.20 for a discussion of "offsite mitigation location."

72.241. On page 3.7-37 [of the DEIR/Technical Appendix], Figure 3.7-8 is not in agreement with the Design Appendix. The tracks actually cut off the last couple residences on Seventh Avenue on the far left in this figure.

**Response.** The purpose of Figure 3.7-8 is solely to depict where one of the possible mitigation measures would occur, and not to address all the details of the project. Figure 3.7-8 does not supersede the drawings in the Design Appendix. It should be noted that many of the figures in the DEIR/SDEIS do not contain all the details provided in the Design Appendix.

72.242. Another weakness in this section is the fact that the Wetlands Delineation Report, dated January 1995, was actually done in a drought year. Most rainfall in the season studied had fallen in the early part of the season so the wetlands were not very wet when studied. It would be interesting to have your experts revisit the wetlands today.

**Response.** Please refer to Response 24.59 for a discussion on the adequacy of the field surveys for the wetland delineation.

72.243. On page 3.8-32 [of the DEIR/Technical Appendix], [Impact] 2, the Hickey Station is within the FEMA-designated 100-year floodplain. Construction of this station and its parking lots and access roads would require fill, thus removing eight acres currently designated as a floodplain and increasing the risk of flooding to adjacent areas....Mitigation measures to keep the water out of the Hickey Station will result in increasing risk of flooding to adjacent areas. It is not fair to place this additional burden on the project corridor neighbors in addition to all the other problems we are going to have from the BART extension.

**Response.** BART will participate with the San Mateo County Flood Control District (FCD) in the construction of an improved channel from the upstream end of the improved channel in the vicinity of Antoinette Lane near Oak Avenue to a point northerly of the new South San Francisco Station. The improved channel will be designed to carry the runoff from a 50- year design storm, the design criteria used by the FCD for the existing channel improvements as well as the planned improvements for the remainder of Colma Creek. This new channel, when combined with the new concrete box culvert at the Station site, will convey both 50- and 100-year storm runoff safely within the concrete lining. Thus, the impact upon the 100-year year flood plain will be to decrease the flooding in these areas.

- 72.244. On page 3.8-32, [of the DEIR/Technical Appendix] [Impact] 3, station facilities would increase the amount of impermeable surfaces and, in turn, increase the amount of rain that becomes runoff. Bring this right into downtown San Bruno for a moment. Your DEIS/DEIR does not mention the history of flooding in this portion of town.

**Response.** The history of flooding in Downtown San Bruno is noted on page 3.8-8 of the DEIR/Technical Appendix, and on page 3.8-1 of the DEIR/SDEIS. There are two reasons this impact does not apply to Downtown San Bruno. First, Alternative VI does not propose a station in Downtown San Bruno and thus this alternative would not affect historical flooding in the area. Second, if Alternative VI did propose a downtown station, it would not increase runoff and thereby contribute to localized flooding impacts. Increased runoff occurs because the ground surface is converted from pervious to impervious surfaces. In downtown San Bruno, the ground is already impervious. Thus, converting a parking lot or building to a BART station would not alter the area's runoff characteristics.

- 72.245. At several points along the alignment you propose cut-and-cover. Currently this is what the DEIS/DEIR shows through San Bruno under Alternative VI. Intuitively you have to know that rainwater is going to come down the hill and flow right into your trench. What is particularly tragic is that, in most cases, your design does not even include drainage capabilities in these open trenches.

**Response.** During construction of the cut-and-cover sections, temporary collection facilities and pumping will control overland flows and keep much of the rainwater from entering the open trench. Temporary pumping facilities within the open trench will evacuate any accumulated runoff from the trench area.

Upon completion of construction, the cut-and-cover subway is a closed concrete box with the ground surface restored to its original levels. The surface water will run off into the storm sewers, and a nominal amount of the groundwater will leak into the subway box. The subway will include sump pumps to handle the leakage. The BART pump system has redundant pumps and power supplies to protect train operations.

- 72.246. [If] this rainwater...goes into the retained cut will [it] short circuit the electricity if the sewers are plugged.

**Response.** The design criteria for the retained cut sections require two pumps at each drainage sump location, each pump sized to handle 100 percent of the anticipated design storm runoff. The system always has a backup pump available and the two pumps in tandem can handle twice the design runoff. These systems will remove the stormwater and eliminate any reasonable concern about flooding that could cause the traction power systems to become inundated.

- 72.247. The San Bruno Director of Public Works has commented that the Belle Air drainage goes to the East and a cut-and-cover along Seventh Avenue would interfere with that natural drainage. I hope BART is paying attention to that.

**Response.** Please refer to Response 72.26 for a discussion of drainage adjacent to cut-and-cover segments.

- 72.248. On page 3.8-9 [of the DEIR/Technical Appendix] you mention there are 54 known active wells within 4,000 feet of the project corridor, with most wells closer than 2,000 feet....What will be

the impacts on the aquifer? What will BART do to protect our supply of drinking water?...Do you have any idea how important these wells are to our communities?

**Response.** The active wells within the project corridor generally draw from an aquifer that is from 200 to 600 feet below the ground surface, which is well below the level of proposed BART construction. Precautions will be taken during construction to avoid contamination of underlying aquifer layers. For a more complete discussion of aquifer contamination issues and aquifer sealing mitigation measures, please refer to Responses 3.8 and 3.9.

- 72.249.a Your comparison charts [at the end of each section in Chapter 3 of the DEIR/Technical Appendix] are nearly impossible to understand.

**Response.** The BART extension is a highly complex project. These tables highlight and compare the differences among proposed alternatives.

- 72.249.b On page 3.9-3 [of the DEIR/Technical Appendix], Table 3.9-1, if these categories are correct, they are not the same as in Table 3.9-2. Summerfield Suites, for example, is a hotel, Category II not V. They are all wrong.

**Response.** The classification of Criteria Area Categories in Table 3.9-2 is, in fact, correct. Classification of Criteria Area Categories is done by comparing the existing ambient noise environments (see Table 3.9-2) to the noise environments set forth in Table 3.9-1. The "Area Descriptions" set forth in Table 3.9-1 are not dispositive for this classification, but are rather intended to provide illustrative examples of typical noise environments. For instance, the existing noise environment at Summerville Suites is characterized by an Ldn of 70 dBA. A Category II area would have an Ldn of no more than 60 dBA. However, in the Summerville Suites areas, jets, CalTrain, local street traffic, and traffic on Highway 101 generate noise consistent with a Category V area.

- 72.250. What happens when BART and CalTrain run through at the same time? Odds are good that it will happen with so many trains.

**Response.** BART and CalTrain would occasionally pass through the same area at the same time, but not a significant amount of the time. Furthermore, CalTrain would be much louder than BART and BART would probably not be noticed above the noise of the CalTrain locomotive. The cumulative noise analysis for the project has examined the combined noise of all sources in the study corridor (e.g., automobiles, trains jets, buses) in addition to BART.

- 72.251. What is the noise level of the horn BART trains use in entering a station to warn patrons waiting on the platform?...What is the noise level of public announcements in the stations?

**Response.** BART train horns are used only occasionally and, although noticeable, would not be a significant noise source in the community. A BART train horn is quieter than a CalTrain horn. The PA system (approximately 77 dBA on platform) should be less than 65 dBA in the community (e.g., much quieter than CalTrain going by). BART horns and PA announcements are low-usage noise effects designed to alert passengers of a train coming into the station or of certain information. As a result of BART's design, such noise would not impact areas outside the BART station.

- 72.252. On page 3.9-9 [of the DEIR/Technical Appendix], Table 3.9-2 why is half of the universe missing data for ground vibrations?

**Response.** As noted in the DEIR/Technical Appendix on page 3.9-4, vibration measurements were taken at selected locations, especially in areas where vibration may be perceptible.

- 72.253. On page 3.9-12 [of the DEIR/Technical Appendix], Table 3.9-4, is that an error in No. IV? The others all increase in five units throughout the chart except this one.

**Response.** The table is correct. As in the other noise and vibration criteria tables, the criteria do not uniformly increase with Criteria Area Category for each building type.

- 72.254. On page 3.9-13 [of the DEIR/Technical Appendix], third line from the top, "Table 3.9-5 on the following page" is really on the same page as this statement.

**Response.** Page 3.9-13 of the DEIR/Technical Appendix, paragraph 1, sentence 2 is revised as follows:

Table 3.9-5 ~~on the following page~~ below presents criteria for evaluating the impact of groundborne vibration of floor surfaces within a building.

- 72.255. Exactly how much continuous noise can we anticipate hearing from those vents, car washes, traction stations, etc.?

**Response.** The amount of continuous noise associated with various BART ancillary facilities depends on the adjoining neighborhood. Maximum levels in San Bruno will be in the range of 50 to 65 dBA, but probably less where residences are greater than 50 feet from these facilities. Not all of the BART noise sources would actually have continuously running noise sources. Except for the traction power substation, the other sources indicated would be operational for only certain periods of the day. Vents emit noise only when a BART train goes by in the tunnel. The ventilation fans are for emergency and infrequent maintenance activities. They normally do not run. Car washes may run 24 hours per day.

- 72.256. Please explain that increases in noise dBA is exponential. Tell the public that if they go from a 45 dBA to a 75 dBA because of BART it will not be like an occasional plane flying overhead. It is going to be much more noisy.

**Response.** The decibel scale used to measure noise is a logarithmic system. To the human ear, an increase of 10 dB is generally perceived as a doubling of loudness. BART will be much quieter than jet planes flying overhead in most areas of the corridor, especially in San Bruno where jet planes frequently generate noise at the ground level exceeding 100 dBA.

- 72.257. Isn't it true that the [floating slab trackbed] system is substantially more expensive than regular track? If so, how much more expensive will it be and was this considered in the construction estimates?...Where has BART already used floating slab trackbed and how successful has it been?

**Response.** It is true that floating slab trackbed is more expensive than standard trackwork. BART has included the cost of mitigation in preparing cost estimates for construction of each alternative. BART installed floating slab trackbed along sections of its Pittsburg-Antioch Extension in Concord. All indications are that it performs as designed. Floating slab trackbed has been used successfully at many transit systems in North America (e.g., Toronto, Atlanta, Washington D.C., Los Angeles, Buffalo N.Y., San Francisco MUNI).

72.258. Please describe resiliently supported ties and how they work to mitigate noise and vibration. Isn't it true that these ties are substantially more expensive than regular ties? If so, how much more expensive will it be and was this considered in the construction estimates? Where has BART already used resiliently supported ties and how successful have they been?

**Response.** Resiliently supported ties were developed in Europe approximately 12 years ago and have been used extensively there. This form of groundborne noise and vibration mitigation is used where less reduction is necessary, because of distance to the sensitive receptor, local soil conditions, sensitivity of receptor or combination of all of these. The cost premium for procurement and installation of resiliently supported ties compared to regular ties is approximately 50 percent. In sections of the alignments where resiliently supported ties are proposed as mitigation, this cost premium has been included in the capital cost estimates. Resiliently supported ties have been used successfully in Atlanta, among other locations. Please refer to page 3.9-19 of the DEIR/Technical Appendix for a description of how these ties work.

72.259. Please describe soft rail fasteners and how they work to mitigate noise and vibration. Isn't it true that these fasteners are substantially more expensive than regular fasteners? If so, how much more expensive will it be and was this considered in the construction estimates?...Where has BART already used soft rail fasteners and how successful have they been?

**Response.** Soft rail fasteners are somewhat more expensive than regular rail fasteners and, similar to resiliently supported ties, are used where not as much groundborne noise and/or vibration reduction is needed. One type of soft fastener has been used extensively in Europe. Other similar fasteners plus this one have been used for transit systems in Los Angeles, Washington, D.C., Atlanta. These devices provide isolation between the vibrating trackbed and the concrete subway box and surrounding soil. The cost premium for procurement and installation of soft rail fasteners compared to standard rail fasteners is approximately 50 percent. In sections of the alignments where soft rail fasteners are proposed as mitigation, this cost premium has been included in the capital cost estimates.

72.260. How expensive will it be to do [offsite mitigation] to the typical home? What homes did you calculate doing it to in your construction estimates?...Where BART has already used similar offsite mitigation, how pleased were the residents...?

**Response.** Although BART has not utilized off-site mitigations for vibration impacts, off-site mitigation costs vary between \$20,000 and \$80,000 per residence. Off-site mitigation such as groundborne noise and/or vibration would be restricted primarily to lightweight structures such as wood frame residential buildings. It would not be feasible to apply off-site mitigation to larger or older structures (see Response 66.204). Off-site mitigation would be considered as an alternative where it was less expensive, and/or more feasible than the other forms of mitigation. For a discussion of various forms of groundborne noise and vibration mitigation, see pages 3.9-19 and 3.9-20 of the DEIR/Technical Appendix.

72.261. [The aerial structure sound wall] is missing a description....How expensive will it be to do this to the typical home? What homes did you calculate doing it to in your construction estimates?...Where has BART already used similar sound walls and how pleased were the residents...?

**Response.** The three to four foot high aerial structure sound wall is constructed on one or both sides of the aerial structure and does not involve any modification to existing buildings. The new Pittsburg-Antioch Extension has sound walls on the aerial structure. BART has a similar sound wall installation in Berkeley and Daly City, both of which are effective in reducing noise. This

type of sound wall has been used successfully on other transit systems in the United States (e.g., Atlanta, Miami, Washington, D.C., Philadelphia, Chicago).

- 72.262. [The closed deck]...is missing a description...How expensive will it be to do this? Where did you calculate doing it in your construction estimates? Where has BART already used similar closed decks and how pleased were the residents...?

**Response.** The closed deck refers to the practice of constructing a reinforced concrete slab that spans the area between the pre-cast girders on aerial structures instead of using open steel grating. This concrete "closed deck" reduces the noise transmitted to the ground from passing trains. The incremental cost difference between closed decks and open decks was not calculated and is insignificant in the conceptual level costs used for this report. Please see Response 13.2 for a discussion of conceptual capital costs provided in an environmental document. Closed decks are being built as part of the Pittsburg-Antioch Extension which is not yet complete.

- 72.263. Throughout, we read "The selection of the appropriate technique will be made during the preliminary design phase." I am sorry but this just will not do. The public will never get a chance to comment on your decision. It will be between the almighty BART and the little resident....

**Response.** CEQA and NEPA are designed to solicit public input to significant environmental issues. Construction techniques selected during the design phase should not alter the conclusions and analysis set forth in the DEIR/SDEIS. In all cases, BART has analyzed a "worst-case" scenario to assure that the technique selected will not result in any greater impacts than those identified in the documents.

- 72.264. Under Alternative VI, where are the [noise and vibration] mitigation measures for the auto rental business on Huntingdon at San Bruno Avenue?

**Response.** There are no significant operational noise or vibration impacts expected for commercial uses under Alternative VI, although some mitigation measures may be required during construction. These mitigation measures can be found in the DEIR/Technical Appendix on pages 3.13-157 through 3.13-163.

- 72.265. Are these figures correct? For example, on page 3.10-69 [of the DEIR/Technical Appendix], Table 3.10-36 for El Camino Real and San Bruno Avenue the 1998 P.M. concentrations are 30 percent higher than in 1993. This increase flies in the face of a steady decline due to other means and it is out of character with the other data in the table.

**Response.** The predicted carbon monoxide (CO) concentrations at the intersection of El Camino Real and San Bruno Avenue presented in Chapter 3, Section 10 are incorrect due to computational error. The correct data are provided in the following tables. Please note that the correct CO concentrations are also less than the state and federal 1-hour and 8-hour ambient CO standards.

Therefore, correction of the error is not significant and does not affect the conclusions of the air quality conformity analysis.

**Revised Carbon Monoxide Concentrations at the Intersection  
of El Camino Real and San Bruno Avenue**

DEIR/ Technical Appendix	Table No.	Alternative	Net or Cumulative	1-hour or 8-hour	El Camino Real/San Bruno Avenue Revised CO Concentration (ppm)								
					1993 A.M.	1993 P.M.	1998 A.M.	1998 P.M.	2000 A.M.	2000 P.M.			
3.10-7	LPA	Net	1-hour	10.5	10.4	44.4 5.2 4.2	9.3 4.3 3.9	44.7 4.7 3.7	10.0 4.3 3.1	49.6 4.8 3.9	9.1 7.1 7.0		
3.10-8	LPA	Net	8-hour	4.3	4.2	5.2 4.5 4.3	3.9 3.4 3.1	4.7 4.9 4.4	3.7 14.2 11.8	3.4 12.5 12.5	2.0 8.2 8.2		
3.10-9	LPA	Cumulative	1-hour	17.0	18.2	45.4 45.9 45.9	13.4 14.2 14.2	44.9 44.9 44.9	11.8 12.5 12.5	4.7 8.2 8.2	1.0 8.3 8.3		
3.10-10	LPA	Cumulative	8-hour	8.1	8.8	4.8 4.8 4.8	9.3 9.3 9.3	6.4 6.4 6.4	5.5 5.5 5.5	5.9 5.9 5.9	3.6 3.6 3.6		
3.10-12	No Build	Cumulative	1-hour	16.7	17.7	12.9 12.9 12.9	13.9 13.9 13.9	11.5 11.6 11.6	12.4 12.4 12.4	8.0 5.3 5.3	8.3 3.5 3.5		
3.10-13	No Build	Cumulative	8-hour	7.9	8.5	6.0 6.0 6.0	6.6 6.6 6.6	5.3 5.3 5.3	12.4 12.4 12.4	8.0 8.0 8.0	3.7 8.2 8.2		
3.10-18	TSM	Cumulative	1-hour	16.9	18.4	12.9 12.9 12.9	13.9 13.9 13.9	11.6 11.6 11.6	12.4 12.4 12.4	8.0 8.0 8.0	8.2 8.2 8.2		
3.10-19	TSM	Cumulative	8-hour	8.0	8.9	6.0 6.0 6.0	6.6 6.6 6.6	5.4 5.4 5.4	5.9 5.9 5.9	3.5 3.5 3.5	3.6 3.6 3.6		
3.10-20	Base Case	Net	1-hour	10.5	10.4	46.8 4.8 4.8	9.5 10.1 10.1	44.7 44.7 44.7	10.0 9.8 9.8	49.7 9.1 9.1	7.1 7.1 7.1	7.1 7.1 7.1	
3.10-21	Base Case	Net	8-hour	4.3	4.2	4.8 4.8 4.8	4.0 4.4 4.4	4.2 4.2 4.2	3.7 3.7 3.7	4.9 3.9 3.9	3.0 3.0 3.0	3.0 3.0 3.0	
3.10-22	Base Case	Cumulative	1-hour	17.0	18.3	45.4 45.9 45.9	13.6 14.3 14.3	43.2 43.2 43.2	11.8 11.8 11.8	44.4 44.4 44.4	12.5 12.5 12.5	8.4 8.4 8.4	
3.10-23	Base Case	Cumulative	8-hour	8.1	8.9	7.8 7.8 7.8	6.4 6.4 6.4	6.4 6.4 6.4	5.5 5.5 5.5	6.9 6.9 6.9	5.9 5.9 5.9	3.8 3.8 3.8	
3.10-24	Alt. IV	Net	1-hour	10.9	10.7	10.4 10.4 10.4	10.3 10.3 10.3	8.9 8.9 8.9	10.3 10.3 10.3	9.1 9.1 9.1	7.1 7.1 7.1	7.1 7.1 7.1	
3.10-25	Alt. IV	Net	8-hour	4.5	4.4	4.6 4.6 4.6	4.5 4.5 4.5	4.5 4.5 4.5	3.8 3.8 3.8	3.9 3.9 3.9	3.0 3.0 3.0	3.0 3.0 3.0	
3.10-26	Alt. IV	Cumulative	1-hour	17.3	18.3	14.1 14.1 14.1	14.1 14.1 14.1	14.5 14.5 14.5	12.3 12.3 12.3	12.8 6.1 6.1	8.3 7.7 7.7	8.4 3.7 3.7	
3.10-27	Alt. IV	Cumulative	8-hour	8.3	8.9	6.7 6.7 6.7	7.0 7.0 7.0	5.8 5.8 5.8	9.2 9.2 9.2	9.3 9.3 9.3	7.0 7.0 7.0	7.1 7.1 7.1	
3.10-28	Alt. V	Net	1-hour	11.5	10.8	9.9 9.9 9.9	10.4 10.4 10.4	9.2 9.2 9.2	4.0 4.0 4.0	4.0 4.0 4.0	2.9 2.9 2.9	3.0 3.0 3.0	
3.10-29	Alt. V	Net	8-hour	4.8	4.4	4.3 4.3 4.3	4.6 4.6 4.6	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	2.9 2.9 2.9	3.0 3.0 3.0	
3.10-30	Alt. V	Cumulative	1-hour	17.6	18.4	14.2 14.2 14.2	14.7 14.7 14.7	12.6 12.6 12.6	12.8 12.8 12.8	8.3 8.3 8.3	8.4 8.4 8.4	8.4 8.4 8.4	
3.10-31	Alt. V	Cumulative	8-hour	8.4	8.9	6.8 6.8 6.8	7.1 7.1 7.1	6.0 6.0 6.0	6.1 6.1 6.1	3.7 3.7 3.7	3.8 3.8 3.8	3.8 3.8 3.8	
3.10-32	Des. Opt. V-B	Net	1-hour	10.9	10.7	42.5 5.8 4.4	10.0 4.3 4.3	43.8 5.6 5.6	9.0 4.6 4.6	2.3 5.8 5.8	9.1 3.9 3.9	7.0 7.0 7.0	7.1 7.1 7.1
3.10-33	Des. Opt. V-B	Net	8-hour	4.5	4.4	5.8 5.8 5.8	4.3 4.3 4.3	5.4 5.4 5.4	3.8 3.8 3.8	2.5 2.5 2.5	2.9 2.9 2.9	3.4 3.4 3.4	
3.10-34	Des. Opt. V-B	Cumulative	1-hour	17.3	18.3	46.8 46.8 46.8	14.1 14.1 14.1	44.6 44.6 44.6	12.4 12.4 12.4	44.5 44.5 44.5	12.8 12.8 12.8	9.3 9.3 9.3	8.4 8.4 8.4
3.10-35	Des. Opt. V-B	Cumulative	8-hour	8.3	8.9	8.3 8.3 8.3	6.7 7.1 7.1	8.4 8.4 8.4	7.2 7.2 7.2	5.9 5.9 5.9	4.3 4.3 4.3	3.7 3.7 3.7	
3.10-36	Alt. VI	Net	1-hour	11.0	10.4	46.7 43.0 4.2	9.2 8.9 4.2	43.0 43.0 43.0	8.7 8.7 3.7	4.4 4.4 4.4	2.0 2.0 3.7	7.1 7.1 7.1	7.1 7.1 7.1
3.10-37	Alt. VI	Net	8-hour	4.6	4.2	4.7 4.7 4.7	3.9 3.9 3.9	6.1 6.1 6.1	5.3 5.3 5.3	3.8 3.8 3.8	3.0 3.0 3.0	3.0 3.0 3.0	
3.10-38	Alt. VI	Cumulative	1-hour	17.4	17.8	45.0 45.0 45.0	13.4 13.4 13.4	44.8 44.8 44.8	11.7 11.7 11.7	4.8 4.8 4.8	12.4 12.4 12.4	8.2 8.2 8.2	8.4 8.4 8.4
3.10-39	Alt. VI	Cumulative	8-hour	8.3	8.6	7.4 7.4 7.4	6.3 6.3 6.3	8.6 8.6 8.6	6.2 6.2 6.2	5.4 5.4 5.4	4.0 4.0 4.0	3.6 3.6 3.6	

**Revised Cumulative Carbon Monoxide Concentrations at the Intersection  
of El Camino Real and San Bruno Avenue**

DEIR/ Technical Appendix Table No.	Year	El Camino Real/San Bruno Avenue Revised CO Concentration (ppm)												Alt. VI
		1993 No Build			LPA			No Build			El Camino Real/San Bruno Avenue Revised CO Concentration (ppm)			
		1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	
3.10-14	1998	17.7	8.5	4.9	14.2	7.8	6.8	13.9	6.6	4.9	14.3	7.8	6.9	14.5
3.10-15	2000	17.7	8.5	4.9	12.5	6.8	5.9	12.4	5.9	4.4	12.5	6.9	5.9	12.8
3.10-16	2010	17.7	8.5	8.7	8.3	2.9	3.7	8.3	3.7	8.7	8.4	2.9	3.8	8.4

72.266. Did BART report to the proper regulatory agencies the additional nine hazardous material sites that you discovered during your inspection [see page 3.11-2 of the DEIR/Technical Appendix]?

**Response.** The nine additional potential hazardous materials site were not directly reported to all relevant regulatory agencies. However, each site is summarized in Table 3.11-2 and described in detail in the Hazardous Material Technical Report, which has been distributed to federal, state, and local regulatory agencies and libraries along the project corridor.

72.267. What mitigation measures will you take concerning the accumulation of herbicide along the ROW? It seems as if this shallow soil will be easy to overlook. How far apart do you anticipate taking samples? How deep will they be? What tests will be performed on the samples? How far in advance of the construction will those results be available? Do you have old records that show where the herbicides were used?

**Response.** It would be speculative to estimate the accumulation of herbicide along the right-of-way at this time prior to sampling activities. Shallow soil samples (0 to 6 inches below grade surface) will be collected as part of the Phase II sampling program for the LPA to identify potential areas of hazardous materials contamination along the project alignment prior to land acquisition and construction. Samples will be collected in representative locations along the right-of-way in low-point potential accumulation areas such as ditches, sediment deposits, or loamy soils adjacent to existing railway tracks. Initially, samples would be collected one-half mile apart, based on the assumption of generally even distribution of the initial herbicide applications and potential residual contamination. Samples will be analyzed for a standard list of chlorinated herbicides based on current EPA laboratory methods. No records exist concerning specific areas of herbicide use. Additional anecdotal information from the relevant transportation companies and agencies will be obtained during development of the proposed sampling program.

72.268. When you encounter a previously unidentified hazardous materials site will you immediately inform officials of the community in which those sites are found?...Which agency will monitor this type of clean up?

**Response.** The procedures to be followed when previously unidentified hazardous materials are encountered or released are described on pages 3.11-10 and 3.11-11 of the DEIR/Technical Appendix. In general, the lead regulatory agency for hazardous materials investigations and/or cleanups along the project alignment would be the San Mateo County Department of Environmental Health. This agency will be informed in the event that previously unidentified hazardous materials sites are encountered.

72.269. Is there any possibility that the existing trackbed may have concentrations of asbestos that fell from passing trains? Removal of this material would certainly be more difficult than removing asbestos from a structure that can be completely enclosed.

**Response.** The possibility that bulk asbestos cargo was transported on the existing tracks is not documented and is considered unlikely. A more likely scenario is that asbestos in train brake linings may have had accumulated along railway tracks. However, the outdoor setting, the length of time since rail traffic traveled parts of the right-of-way, rain wash, and the generally high background concentrations of asbestos from other vehicle brake linings support the assumption that asbestos is not a significant issue along the existing rail lines.

72.270. Does BART have an emergency plan to inform the people in "sensitive receptors" of the dangers you might uncover during construction?

**Response.** Please refer to Response 28.3 and page 3.13-207 of the DEIR/Technical Appendix for a discussion of the proposed BART Hazardous Materials Contingency Plan which will specify emergency response and hazard communication procedures to be followed in the event of discovery of hazardous contamination during construction.

- 72.271. How much asbestos is found in the construction equipment?

**Response.** In general, friable asbestos in construction equipment is limited to brake linings. The quantity of asbestos in these brake linings is similar to the amount found in the brake linings of regular trucks or other heavy vehicles.

- 72.272. This is not really an error but you definitely need an alternative comparison chart showing the location of "High Priority" sites per Alternative. Table S-7 [in the Executive Summary] is of no help at all.

**Response.** The locations and summary listings of all "high-priority" sites are presented in Figure 3.11-1 and Table 3.11-2, respectively, of the DEIR/Technical Appendix. The purpose of Table S-7 in the Executive Summary, is to present "Key Impacts" for each alternative. In general, the high priority sites were selected because they potentially affect all project Alternatives.

- 72.273. On page 3.11-10 [of the DEIR/Technical Appendix], how will you investigate existing buildings for asbestos "prior to property acquisition". Those of us in the business know that asbestos is found in tiles, mastic, insulation, etc. All too often we do not uncover it until we have taken up a level or two of material or broken into a wall.

**Response.** Standard industry practice is for an asbestos survey to be conducted by a licensed inspector prior to demolition or renovation of older existing structures. Existing structures proposed for acquisition and/or removal will be surveyed for asbestos content prior to property transfer. The asbestos survey will include sampling of suspected asbestos-containing material (ACM) such as floor tiles, mastic, insulation, and roofing material. However, an asbestos survey cannot be conducted until the project alignment is selected.

- 72.274. Should you, for example, find asbestos in Carl's business before you buy it, will he be responsible for its removal before you buy him out? What if there is an underground tank on his property that no one knows about? Who pays to have that removed?

**Response.** If a potential environmental problem is identified prior to property acquisition, BART will enter into negotiation with the property owner to determine financial responsibility for subsequent mitigation measures. In the unlikely event that a totally unknown underground storage tank is discovered during construction, the party responsible for removal and cleanup will be determined in compliance with all applicable laws.

- 72.275. The potential impacts from electromagnetic fields have not been properly identified. It is unconscionable that BART would want to locate its alignment so close to so many schools.

**Response.** Please refer to Response 72.28 regarding BART's measurement and analysis of electromagnetic fields (EMF). BART has adopted designs for substations which allow for rapid attenuation of emitted EMFs. Nevertheless, as described on pages 3.11-11 through page 3.11-15 of the DEIR/Technical Appendix, the scientific evidence regarding the potential health effects associated with EMF is inconclusive: some research suggests that EMF pose some risk to human and animal health, while other studies indicate that these fields do not have any adverse health

effects. Therefore, due to the speculative nature of determining the impacts from EMF, the EIR analysis is limited to a qualitative discussion of EMF effects, as explained on page 3.11-15 of the DEIR/Technical Appendix.

- 72.276. Who do you think you are kidding when you say "landscaping with mature trees at heights of 10 to 20 feet around all traction power substations" will shield us from electrical fields?

**Response.** Please refer to Response 72.28 for a discussion of EMF impacts from traction power substations.

- 72.277. On page 3.11-19 [of the DEIR/Technical Appendix], "the nearest residence to any of the traction power substations is about 60 feet away (see Table 3.11-3)." On Table 3.11-3, for alternatives IV through VI the distance to nearest residence or school is 25 feet. For Alternative III the distance is 40 feet.

**Response.** Please refer to Response 72.28 for an explanation of distances from substations and EMF attenuation to ambient levels. Substation design would attenuate EMF in far less than 25 feet.

Both the text referred to by the commentor and the information contained in Table 3.11-3 regarding the distance to the nearest receptor from traction power substations are correct. The text states that the nearest residence to any of the traction power substations is about 60 feet away, which is true for the proposed project, the subject of the impact assessment on page 3.11-19. Under the impact assessment for the other build alternatives, the EIR notes that the nearest residence to EMF sources is 40 feet for Alternative III and 25 feet for Alternatives IV through VI.

- 72.278. On page 3.12-3 [of the DEIR/Technical Appendix], you predict that for this extension the energy savings would be in the higher range....This statement seems to infer that there will be shorter headways on the extensions (particularly during peak hours, I assume). How is this in keeping with earlier statements that there will be only two lines coming from Daly City and of those, one line will send only every other run to the airport?

**Response.** The reason energy savings would be in the higher range is that the proposed operating plan, as defined on page 2-31 of the DEIR/Technical Appendix, provides relatively close rail headways. There will be only two routes south of the Daly City Station for the BART extension as described in the operating plan, providing 4.5-minute peak and 7.5-minute midday weekday headways.

In addition, one of the conservation measures BART incorporates to avoid or reduce inefficient, wasteful, and unnecessary consumption of energy is regenerative braking. The shorter the headway, the higher the savings.

- 72.279. Don't steel tires cause more noise than rubber and/or wooden tires?

**Response.** Though rubber and wooden tires are, in general, quieter than steel wheels, only a few modern transit systems (Mexico City, Montreal and a portion of the Paris Metro) plus several "people mover" systems serving airports and other activity centers operate on rubber tires. The fixed-guideway transit systems of the world operating at the speeds and loads similar to BART are on steel wheels. Steel wheels provide the guidance and switching necessary for the BART system; rubber tired systems require additional devices and added costs. Under conditions and speeds similar to BART (over 55 mph), steel wheels are more cost effective than rubber tires. The cost of

replacement of the steel wheels for BART vehicles is relatively inexpensive due to the high mileage achieved by wheels on the BART system.

- 72.280. Are steel tires more cost effective when it comes to replacement, etc.?

**Response.** The cost of replacement of the steel tires for BART vehicles is relatively inexpensive due to the high mileage achieved by wheels on the BART system, as compared to other steel-tired systems. The wheels themselves are relatively expensive. Replacement costs for wheels on steel-tired systems are generally more cost effective than for rubber tired systems, especially when speed, power consumption, and safety are considered. Wheels on BART cars use a steel rim which is pressed onto an aluminum hub to reduce the cost.

- 72.281. How does station spacing affect the amount of traction power a train needs? It seems that a train with a particular weight will need the same amount of power, once it has accelerated, whether it goes one mile or two miles.

**Response.** The parameters to determine the energy consumption for a train to travel from one point to another include train mass, frontal area, and other vehicle characteristics; and the track geometry including grades, curves and travel distance. In general, energy is directly proportional to the product of force and distance. This being the case, energy consumption is increased as distance is increased.

The weight of a train and its passengers affects the amount of power required to accelerate or decelerate. More energy is consumed during the acceleration phase than during the cruise phase over short distances. With all factors being equal, shorter distances between stations would increase overall energy consumption.

- 72.282. Is the fact that BART will sway back and forth seven times coming from Colma mean it will use up more power per foot traveled? It seems that this constant back and forth motion would either slow down the trains or use up more power to move at the same speed had the line been straight.

**Response.** The Aerial Design Option LPA has seven horizontal curves over the 8.1 mile distance between the Colma Station and the proposed Airport International Terminal Station. The BART train will tend to move in the direction opposite the curve radius due to centrifugal force. This movement is accounted for in BART's design criteria to provide passenger comfort by superelevating the outside track on curves. Design consideration includes train speed, track curvature, and superelevation. BART's design criteria specify maximum preferred passenger imbalance (superelevation) on horizontal curves. The design criteria are designed to provide for passenger comfort on horizontal curves. All of the proposed curves between the Colma and Airport International Terminal Stations satisfy BART's horizontal passenger imbalance criteria.

Theoretically, curves on the track alignment do provide additional resistance to the forward motion of trains. However, this resilience is insignificant compared to the resistance due to track gradient and windage. For this reason, the effect of curves is sometimes not considered in power system analyses. The amount of power a train consumes per foot on a given alignment should remain the same provided the same train operating conditions are maintained at any given time. This power consumption is not affected by the number of times a train curves over the same alignment. Train speeds on curves are intentionally lowered to minimize rail wear and provide comfort to passengers.

72.283. How does speed affect the amount of traction power a train needs? Does it use more power the faster it goes? It would be interesting to see more information on this.

**Response.** Power is required for acceleration, while deceleration creates power by regeneration. In general, more power is used to accelerate from stop to cruising speed than is used to maintain a train at cruising speed. At cruising speed, the energy required is increased at higher speeds. Energy consumption varies to the square of the speed.

72.284. Have you ever studied, all other factors being equal, whether a train uses less power in a tunnel vice at grade, vice aerial? If so, what were the conclusions?

**Response.** To precisely calculate the energy efficiency of different types of transit routes and technologies, a broad spectrum of factors must be considered. These factors include but are not limited to propulsion energy (the energy required to operate stations, control systems, and other appurtenances) and the energy consumed by passengers accessing the system. Widely varying results and interpretations have been reported by the Institute of Transportation Engineers, reflecting disagreements about assumptions and about the proper method of analysis. Therefore, the short answer to this question is that, with all other factors being equal, the traction power would remain the same, regardless of the track alignment type. However, the short answer to this question is that, with all factors being equal, the traction power would be higher for trains in tunnels due to the piston effect. The same power would be required for trains at grade or in an aerial alignment.

72.285. On page 3.13-1 [of the DEIR/Technical Appendix], at the very bottom, you should explain that the tunnel sections may progress at 200 feet per week but that does not include the bored tunnel. I have it on good authority that boring will move ahead, hopefully at 30-40 feet under the wetlands and maybe by an additional ten feet per day through San Bruno if that is approved.

**Response.** The expected rate of advance of an earth pressure balance machine in sandy material is 40 feet per day.

72.286. How fast do you construct aerial sections?

**Response.** Aerial line construction can progress at approximately 100 route feet per week. This information is added to the DEIR/Technical Appendix, page 3.13-5, paragraph one, as a new last sentence:

The construction rate for aerial line segments is approximately 100 feet per week.

72.287. Page 3.13-3 [of the DEIR/Technical Appendix], it is insane to think that there will be 52,000 truck-trailer loads of excavated material along the project corridor....Can we know how many trailer-truck loads you will have in each community?

**Response.** The quantity of excavated materials has not been categorized by community. This information will be available once preliminary engineering is completed. However, a rough estimate for truck loads of excavated materials by community is as follows: Colma 16,000 truck loads; South San Francisco 23,000 truck loads; and San Bruno 13,000 truck loads.

72.288. How many trailer-truck loads of material can we expect to be brought back in as backfill?

**Response.** Approximately 40 to 45 percent of the material excavated for cut-and-cover construction would be stockpiled on work areas adjacent to the cut-and-cover trench, or on contractor lay down areas in the vicinity. Thus, a proportionately smaller number of trucks would travel the same haul routes during back filling.

- 72.289. Who is going to pay to repair our access streets on which these trucks traverse daily?

**Response.** Please refer to Responses 17.70 and 17.87 for a discussion of damage to city streets during construction and reimbursement for any required repair work.

- 72.290. Somewhere in here, BART should explain tie-backs.

**Response.** On page 3.13-4 of the DEIR/Technical Appendix, after the first partial paragraph, new text is added as follows:

An excavation support system must be installed to temporarily support the excavated earth surfaces while the permanent concrete subway box is constructed. Of the many available systems, two are of interest for the soil conditions in the project corridor:

- *Internal Bracing* - This method is feasible where the excavation is deeper than the groundwater table or where right-of-way is not available for tie-backs. Either sheet piles, or H piles with timber lagging between, are installed on the excavation lines. Transverse steel struts are installed as the excavation proceeds to prevent the walls from moving into the empty space. When the full depth is reached, a concrete base slab is poured to stabilize the bottom. The struts are removed as the permanent concrete subway box is installed. The temporary piles are removed and the volume above the permanent box is backfilled.
- *Tie Backs* - This method is feasible where subsurface easements are available, extending out at least 30 feet from the face of the excavation. In this case, steel H piles and lagging are supported by steel rods installed and anchored in holes drilled into undisturbed soil outside the excavation. The subsurface construction easements required for these tie-backs will not interfere with any facilities or uses on the surface. Soil nailing is another type of tie back system. Tie back systems are widely used to eliminate the transverse struts of the internal bracing system, which interfere with the excavation operation.

- 72.291. If BART does bore its tunnel through San Bruno where will you have the staging area? It is on a closed Forest Lane?...At the staging area how many trailer-truck loads can residents expect to have trampling through their neighborhoods 24 hours per day? Is that staging area, which operates around the clock, noisy other than for the trucks coming and going?

**Response.** If tunneling were to occur through San Bruno, the staging area would be on the vacant triangle south of Herman Street bounded by Herman Street, the CalTrain mainline, and the San Bruno branch tracks. Eighty truck loads per ten-hour day would occur for the following 33 weeks. Other activities at the tunnel mobilization site include the following:

- Lifting the excavated soil to the surface by hoist or conveyor, and stockpiling on the surface.
- Loading the stockpiled soil on the trucks for disposal.
- Receiving and handling the pre-cast tunnel liners.
- Receiving and handling miscellaneous materials and supplies.

- Office and labor facilities.

The noise generated by other, non-truck sources (generators, cranes, loaders, fork lifts) would be somewhat less than the noise generated by the trucks. These noises would be mitigated to an insignificant level by BART's Construction Noise Criteria (e.g., the use of efficient mufflers, restricted noise levels).

- 72.292. What is the differential in excavated materials between a foot of cut-and-cover versus a foot of bored tunnel? It would be helpful if you explain the differential in trailer-truck loads we might experience in San Bruno.

**Response.** There is a notable difference in the amount of excavated material between cut-and-cover and bored tunnel construction. The volume of loose excavated material is 62 cubic yards per foot of cut-and-cover tunnel construction, and 29 cubic yards per foot of bored tunnel construction.

Assuming the contractor uses trucks with a 20 cubic yard capacity, it would take three trucks to haul away the material from one linear foot of cut-and-cover excavation, and one and one-half trucks to haul away the material from one linear foot of twin tunnel excavation.

- 72.293. On page 3.13-5 of the DEIR/Technical Appendix, could you expand please on the garage at Tanforan Shopping Center? On 3 November 1994 one San Bruno council member said the current garage would be torn down. BART says it will be renovated. What is the true story on that garage?

**Response.** The Tanforan Station concept plan under Alternative VI and the Alternative VI Aerial Design Option have been revised. The parking garage for this BART station would be a separate, new structure located to the east of the existing Sears Tire, Battery and Auto Center. The Tanforan Park Shopping Center garage would not become a joint use facility under any of the BART build alternatives, and decisions concerning the Center's garage will remain solely under the jurisdiction of the owners of Tanforan Park Shopping Center. Please refer to Responses 17.4 through 17.7 for further discussion of the revised Tanforan Station concept plan under Alternative VI and the Alternative VI Aerial Design Option.

- 72.294. On page 3.13-8 [of the DEIR/Technical Appendix], I oppose the use of Bayshore Circle as a staging area. That street is integral to accessing portions of the Fifth Addition and you cannot ask those residents to suffer anymore.

**Response.** The San Bruno Branch of the SPTCo right-of-way along Bayshore Circle adjacent to the BART alignment could serve as a staging and access area for construction. The use of this property was evaluated for the potential impacts to Bayshore Circle Park on pages 5-2 through 5-6 of the DEIR/Technical Appendix. This potential laydown area would block pedestrians crossing the median of Bayshore Circle west of the park. Construction activity would also cause noise in the vicinity of the park. No temporary or permanent restrictions to the park would occur, nor would the quality of the park be diminished. If this laydown area were chosen, use would be restricted to the western portion of the right-of-way. Construction activity would not be permitted on the roadways of Bayshore Circle North or Bayshore Circle South and pedestrian access to Bayshore Circle Park would be maintained. The City of San Bruno Department of Parks and Recreation has been consulted regarding possible impacts to this park.

- 72.295. On page 3.13-9 [of the DEIR/Technical Appendix], those two tunnel construction laydown areas for the San Bruno bored tunnel do not sound right anymore? Hasn't BART decided it would not be a good idea?

**Response.** Both of the potential laydown area sites are still being considered for this alternative. If the design option that includes the tunnel option from San Bruno to the SFIA terminal and then to Millbrae is not selected, these "Tunnel Construction Laydown Areas" would not be used.

- 72.296. On page 3.13-10 [of the DEIR/Technical Appendix], Table 3.13-2, there appears to be some confusion on Huntington Avenue. Alternative V not only temporarily removes parking lanes, it removes all the structures, including the Church of God....

**Response.** Refer to Response 66.151 for a revised Table 3.13-2, Roadway Lane Closures.

- 72.297. When are we going to know which of the two haul routes you will use from San Bruno under Alternative VI and Alternative V-A?

**Response.** The actual haul routes to be used in the San Bruno area will be selected as a result of negotiations between BART, the City of San Bruno and Caltrans.

- 72.298. I do believe that is an error on page 3.13-13 because under Alternative VI the station will be constructed at Tanforan Shopping Center. If selected, it sounds a little harsh to think that all that gunk is going to be brought through the Belle Air to a temporary road and over a 150 foot bridge across the wetlands.

**Response.** The last paragraph on page 3.13-13 discusses material to be hauled from the San Bruno portal, a tunneling operation not sited at the Tanforan Station site. This portal would be located at the contractor's laydown area. Truck access for hauling material is described on page 3.13-9, paragraph three of the DEIR/Technical Appendix.

- 72.299. On page 3.13-14 [of the DEIR/Technical Appendix], you should change those tentative construction dates now that this has been delayed.

**Response.** These dates have been corrected in the FEIR/FREIS. Page 3.13-14, last paragraph, is revised as follows:

The third sentence shall read "Heavy construction ...between early 1997 and early 1999."

The fourth sentence shall read "Actual line/station...between early 1997 and early 1999."

- 72.300. Throughout the construction portion, I thought we would be using trailertrucks for the earthwork but these tables show we will be using dump trucks. Which is correct?

**Response.** The truck trip calculations are based upon the use of 20-cubic-yard-capacity truck and trailer combinations. All uses of the term "dump trucks" shall be understood to mean trailer trucks having a capacity of 20 cubic yards. However, the contractor is not precluded from using smaller capacity dump trucks on occasion.

- 72.301. Since the tables are based on the capacity of dump trucks, can we have the revised figures should you use trailer-trucks as you stated earlier in this section?

**Response.** Please refer to Response 72.300 for an explanation of truck capacity. A revised set of figures is not warranted since the estimate is based on the use of the average capacity truck anticipated for this project.

72.302. On page 3.13-21 [of the DEIR/Technical Appendix], Table 3.13-7b, the construction of all those stations through to Millbrae will involve 3,664,100 person hours. On page 3.13-24, Table 3.13-9, the construction of two fewer stations stopping in San Bruno will involve 3,378,100 person hours. It is hard to believe that the Millbrae and Airport stations add only 286,000 person hours of construction. That is 7,215 work weeks (of 40 hours) or 1,370 person years to build two whole stations and additional track from San Bruno.

**Response.** As shown in Table 2.4-1 of the DEIR/Technical Appendix, Alternative V consists of three stations (Hickey, Tanforan and Millbrae Intermodal) and is 6.9 miles long. Alternative V-B consists of two stations (Hickey and I-380/San Bruno) and is 5.7 miles long. Thus, the additional 286,000 hours is for only one additional station and an additional 1.2 miles of track alignment.

72.303. On page 3.13-25 [of the DEIR/Technical Appendix], Table 3.13-10a, under structures, I do believe that should be two tunnel machines and a consequent increase in conveyors, etc.

**Response.** The commentor is correct. The equipment listed in the Structures row in Table 3.13-10a on page 3.13-25 is revised under Equipment/Comments to be plural.

72.304. On page 3.13-26 [of the DEIR/Technical Appendix], Table 3.13-10b, under structures, I do believe that should be three tunnel machines and a consequent increase in conveyors, etc.

**Response.** The commentor is correct. Table 3.13-10b on page 3.13-26 is revised to reflect plurals on all equipment listed in the Structures row, Equipment/Comments column.

72.305. On page 3.13-62 [of the DEIR/Technical Appendix], [Impact] 9, you state that Alternative V would generate temporary employment of about 1,500 to 2,000 person years. As shown above at comments for page 3.13-4, the differential from Alternative V and Alternative V-B is 1,370 person years. Here we see that all of Alternative V will generate temporary employment of 1,500 to 2,000 person years. That means laying track from Colma to San Bruno and building a station in South San Francisco and another in San Bruno will take between 130 and 630 person years to construct.

**Response.** The difference between Alternative V and Alternative V-B of 286,000 person hours amounts to approximately 140 person years. One person year is equal to 2,080 hours (52 weeks at 40 hours per week).

72.306. On page 3.13-95 [of the DEIR/Technical Appendix]. "Construction of Alternative VI would occur within 30 feet of the American Legion Post and be adjacent to the old commercial buildings on San Mateo Avenue (601-505 and 609-617) in San Bruno." Alternative VI better not go down San Mateo Avenue. Your drawings do not show this alternative anywhere close to those two buildings.

**Response.** The Design Appendix showing the plans and profiles for Alternative VI indicate that the construction right-of-way for this alternative would encompass the full width of Huntington Avenue. In addition, the plans and profiles indicate the reconstruction of San Mateo Avenue at its intersection with the Huntington Avenue and the CalTrain mainline. The properties identified by this impact statement are adjacent to or very close to the construction zones for Alternative VI. While Alternative VI would not go down San Mateo Avenue, its construction would be proximate to the American Legion Post and the commercial buildings on San Mateo Avenue, enough so that there would be significant short-term adverse effects to the physical setting of these properties.

However, as noted in Response 72.228, there would be no physical impacts to any of these buildings beyond the construction period under any of the build alternatives.

- 72.307. On page 3.13-155 [of the DEIR/Technical Appendix], [Impact] 3, under Alternative VI, "construction activities in drainage ways and flood plains may temporarily block the flow of water and increase the risk of flooding." The proposed mitigation measure is dry season construction....Due to the way this project is moving ahead, it appears as if it will be extremely difficult to schedule the construction portion during the dry season. This will be especially difficult since the construction period is expected to last 24 months.

**Response.** To clarify BART measures to mitigate flooding impacts during construction, Mitigation Measure 3.2 on page 3.13-148 is amended to read as follows:

*3.2 Maintain Unobstructed Drainageways. Drainageway diversions necessary to accommodate construction activities during the wet period should be fully operational before existing drainageways are blocked off. Diversions of drainageways should be constructed without obstructing the existing drainage course during wet periods. Only when the diversion is fully operational should the existing drainageway be blocked off.*

- 72.308. On page 3.13-158 [of the DEIR/Technical Appendix], Table 3.13-12, apparently there is an error in the heading because this is either intermittent or continuous.

**Response.** The heading is correct but the subheading in column two is incorrect. Table 3.13-12 is revised as follows:

Maximum Allowable Continuous Intermittent Noise Level, dBA.

- 72.309. On page 4.17 [of the DEIR/Technical Appendix], I believe that Alternative VI does not displace 5,255 residents. If it does, than the rest of your figures in this DEIS/DEIR are incorrect.

**Response.** The error has been noted and corrected as part of Response 66.171. The correct estimate of displaced residents under Alternative VI is 525, not 5,255.

- 72.310. Why does BART want to spend a billion dollars on a transit extension that will, by its own admission, increase traffic on freeway segments South of the airport?

**Response.** Although certain freeway segments may see increased traffic congestion, the extension project is intended to reduce overall highway congestion and respond to future travel demand. Please refer to pages 1-6 and 1-7 of the DEIR/Technical Appendix.

- 72.311. What exactly will BART do with the mature trees found in these parks when the areas are used for laydown areas? How can you positively prevent hazardous material spills from damaging them irreparably?

**Response.** Any park area proposed as a laydown area would include the proviso that all existing mature trees are to be preserved in place. In addition, the contractor will be required to have in place an approved hazardous material spill containment and cleanup program to be implemented in the event of an accidental spill.

72.312. On page 5-20 [of the DEIR/Technical Appendix], Figure 5-8 shows how BART will desecrate three cemeteries. I am sorry, but I still do not understand this route and I may never understand it for all eternity. There is absolutely no reason to take this path.

**Response.** Figure 5-8, on page 5-20, shows the plan view of the proposed BART extension, which follows the abandoned Southern Pacific San Bruno branch and parallels the #40 Inter-City trolley line route between San Francisco and San Jose through the Hills of Eternity, Cypress Lawn Cemetery, and Holy Cross Cemetery in Colma. All of the proposed BART build alignments are subway in this segment except for Alternative III (Base Case) which is below grade, open retained-cut.

Environmental impacts of the proposed BART extension on the cemeteries in Colma are fully documented the DEIR/Technical Appendix. Key impacts and mitigations to the cemeteries are highlighted below. As described in Section 3.2, Land Use, of the DEIR/Technical Appendix, the proposed BART subway alignment would be consistent with Colma's General Plan as compared to the open retained-cut Base Case alignment, which is inconsistent. Land use incompatibility with the cemeteries of the Base Case Alternative is described on page 3.2-42 of the DEIR/Technical Appendix.

As described on page 3.3-29, Visual Quality, the proposed BART subway alignment would cause the temporary removal of mature trees within the cemeteries. This impact is mitigated in the long term but remains significant in the short term. As described in Section 3.3, the retained cut Base Case alignment through the cemeteries would cause a significant permanent removal of trees and would significantly affect the visual setting in Colma cemeteries. In addition, as described on page 3.4-22, Cultural Resources, the retained cut Base Case alignment would adversely affect the cemetery properties that are potentially eligible for nomination to the National Register of Historic Places by altering the visual and audible surroundings.

72.313. On page 6-1 [of the DEIR/Technical Appendix], what are the expected savings from BART's participation in the FTA's Turnkey Demonstration Program?

**Response.** BART and SamTrans expect to save approximately 25 to 33 percent of project costs that would otherwise be expected through use of the design-build method. BART management costs are expected to be approximately one half of what they would be under a conventional build contract, as determined through comparison of planned BART management on this project and management on the Pittsburg/Antioch and Dublin/Pleasanton Extensions.

72.314. Where else has BART used a design/build and can we have more concrete figures on the expected savings?

**Response.** BART has used the design-build process in the past in the construction of the Pleasant Hill and Walnut Creek parking structures. Please refer to Response 72.313 for a discussion of expected savings on the project.

72.315. On page 6-1 [of the DEIR/Technical Appendix], under "soft costs" engineering and administration are separated. What exactly are the estimates for administration that are included under engineering in Table 6-1? There definitely should be some cost savings because this is a design/build.

**Response.** Approximately 15 percent of the line item seen in Table 6-1 "Engineering Services" is BART administrative costs. Approximately one-quarter of typical engineering costs are expected to be saved through use of the design-build method.

72.316. Are those ROW costs substantiated by data? If so, when will this be made public...?

**Response.** A Final Relocation Housing Study has been prepared concurrently with this FEIR/FEIS. The study outlines costs of residential acquisition and household relocation.

72.317. Is it true that BART can make no acquisitions in San Mateo County and therefore all ROW will be acquired by SamTrans?

**Response.** As described on page 3.2-56 of the DEIR/Technical Appendix, it is correct that within San Mateo County all right-of-way will be acquired by SamTrans.

72.318. How will SamTrans eventually transfer title to BART for all this property and when can we expect to see that happen?

**Response.** BART will utilize the services of SamTrans to acquire the property required for the project. SamTrans will hold title until it no longer needs the property to back bonds required and sold for the project. BART will own the property after SamTrans quits claim to it.

72.319. On page 6.1 [of the DEIR/Technical Appendix], Table 6-1, are these 1996 dollars going to be readjusted because 1996 no longer seems to be the mid-point of construction in a 60-month schedule?

**Response.** Cost estimates have been refined since publication of the DEIR/SDEIS through further preliminary engineering and adjustments to schedule. Please refer to the Financial Analysis, Volume I of this FEIS/FEIR for further information on the current cost estimates.

72.320. How much of the \$113,311 ROW costs for Alternative VI are connected with the acquisition of Tanforan property?...Where can we get information on the BART/Tanforan agreement on the parking garage?...Is Tanforan the only place where BART has a private party agreement? If not, where else was it and how successful has it been?

**Response.** Please see Response 13.2 for a discussion of conceptual cost estimates. The Aerial Design Option LPA does not include a shared parking garage.

Private-party agreements have been used throughout the BART system over its entire history with success. Examples include the commercial/residential development at El Cerrito Del Norte, access to San Francisco Center at Powell Street Station, and access to the Emporium at the 19th Street Station.

72.321. Where is the breakout on station costs? I assume this includes costs of parking garages also. How much of this figure is for garages?

**Response.** Please refer to Table 6-1 of the DEIR/SDEIS for conceptual cost estimates for the project, including a line item for station costs, and to Response 14.100 for a discussion of sub-elements of project costs. Station costs include costs of parking structures, with parking structure cost estimates determined on a unit cost basis, and varying with the station.

72.322. In Table 6-1, how much of ROW is for residential mitigation?

**Response.** The portion of right-of-way costs associated with residential acquisition and relocation varies with each alternative. For the Aerial Design Option LPA, funds for the acquisition of the approximately 208 units, and relocation costs for the households involved, are included in the right-of-way line item.

- 72.323. What contingency does BART use in this DEIS/DEIR?

**Response.** Please refer to Table 6-1 of the Summary DEIR/SDEIS, and to Response 72.56 for a discussion of contingency costs.

- 72.324. Is the \$377,080,000 line cost for Alternative VI correct? It appears to be far out of line. If correct, could you provide a notation with an explanation, please?

**Response.** The line costs for Alternative VI are substantially greater than those shown for Design Option V-B because of the greater length of track (approximately one mile longer than any other alternative), and the cost associated with subway/tunnel construction, which has higher associated construction costs than other construction methods.

- 72.325. Is it true that BART will need the same number of vehicles regardless of which alternative is selected?

**Response.** As shown in Tables 3.1-10, 3.1-30, 3.1-38, 3.1-46, and 3.1-62 of the DEIR/Technical Appendix, the incremental BART fleet vehicle requirements above the No Build Alternative is 46 cars for all of the BART build alternatives.

- 72.326. How does this compare with the increase in vehicles required for the Dublin line?

**Response.** The incremental BART fleet vehicle requirement under the No Build Alternative for through service (for a Dublin/Pleasanton-Daly City line) is 97 vehicles, including spare cars. This number includes fleet requirements on both the Dublin/Pleasanton line and the remainder of the BART line to Daly City. Based on the ratio of Dublin/Pleasanton Extension mileage to total mileage operated to Daly City, about 33 cars would be attributable to the Dublin/Pleasanton portion of the line.

- 72.327. Is it true that SamTrans will need the same number of vehicles regardless of which alternative is selected?

**Response.** SamTrans will require seven new buses to provide feeder service for each of the BART build alternatives.

- 72.328. If the number of vehicles varies should there not be a difference in Table 6-1?

**Response.** Until SamTrans completes a service study and determines vehicle requirements, the same figure of \$1.628 million is used for SamTrans vehicle purchase under all BART build alternatives.

- 72.329. In Table 6-1 [of the DEIR/Technical Appendix], where is the breakout of vehicle costs? Is it true that the sticker price on a brand new 70 foot electric powered car with padded seats and no air bags will cost between \$2 and \$3 million?

**Response.** The cost of a new BART car at the time of the conceptual cost estimates was between \$2 and \$3 million.

- 72.330. Is it true that BART will pay SamTrans \$104,622,000 for the acquisition of their new seven vehicles?

**Response.** Estimated project costs include \$1.6 million for SamTrans vehicles. SamTrans has not yet determined the number or type of vehicles to be purchased.

- 72.331. Where are the CalTrain figures for the additional vehicles they will need? I thought I saw they would be increasing their runs from 60 to 86?

**Response.** The expansion of CalTrain service from 60 to 86 one-way trains per day as described in the TSM Alternative is outside the definition of the BART-San Francisco Airport Extension project. The Peninsula Corridor Joint Powers Board will determine how any associated costs would be covered.

- 72.332. Finally, where did BART get the \$1,628,000 for SamTrans vehicles as shown in the DEIS/DEIR?

**Response.** The figure comes from MTC's AA/DEIS/DEIR cost estimate, and is being kept in place until SamTrans determines the number and type of vehicles required.

- 72.333. Where are the Administration costs shown and how much are they per alternative?

**Response.** Please refer to Response 72.315 for a discussion of engineering and administration costs.

- 72.334. On page 6-3 [of the DEIR/Technical Appendix], either these 1996 dollars are really 1993 or the title on Table 6-2 is incorrect. I was told the correct year is 1996.

**Response.** The costs in the table are expressed in terms of 1996 dollars, not 1993 dollars, as indicated in the table. Page 6-4, Table 6-2 of the DEIR/Technical Appendix is revised as follows:

Table 6-2  
Estimated Operating and Maintenance Costs in 2010  
Millions of ~~1993~~ 1996 Dollars

- 72.335. These system-wide operating and maintenance figures appear to be different from those shown on page 2-77.

**Response.** As noted by the commentor, the operating and maintenance figures on page 2-77 of the DEIR/Technical Appendix are incorrect. The third sentence of paragraph two on this page is revised as follows:

As indicated, the operating and maintenance costs for the entire BART system range from ~~\$275.8 million (in 1993 dollars)~~ ~~\$301.4 million (in 1996 dollars)~~, for Design Option V-B to ~~\$278.7~~ ~~\$304.4~~ million for the proposed project, to about ~~\$282.9~~ ~~\$309.1~~ million for Alternative VI.

- 72.336. On page 6-4 [of the DEIR/Technical Appendix], Table 6-2, apparently the annual costs under LPA and I-380 Least Cost should be something other than the \$314.4 shown there. I think I was told

they should both be \$304.4....The two entries under each of them should be reduced by \$10 million each.

**Response.** Please refer to Response 30.20 for a discussion of the error in Table 6-2.

- 72.337. In Table 6-2 [of the DEIR/Technical Appendix], please explain the \$3.2 million difference between No Build and TSM. Is the negative figure due to a reduction in express bus service?

**Response.** The \$3.2 million is the cost associated with operating the Colma Station and associated line. The figure depicting estimated costs of operations of the San Francisco Airport Extension (from south of the Colma tailtrack) is shown in the line labeled "Difference from TSM." This amount is \$35.3 million for Alternative VI.

- 72.338. Fix the \$3.0 on Table 2.3-2 [of the DEIR/Technical Appendix] or explain why there is a \$200,000 increase in Table 6.2. That does not seem to be anything like a 3 percent inflationary increase anywhere along the line.

**Response.** Table 2.3-2 should be identical to Table 6-2. The correction has been made in the DEIR/Technical Appendix.

- 72.339. How can SamTrans costs be similar for all build alternatives when there is a tremendous difference in the number of local transit passengers who will be boarding BART at the various peninsula stations?

**Response.** Please refer to Response 14.96 for a discussion of SamTrans operations and maintenance cost responsibilities. BART's greatest operational costs are for labor and power. Neither cost would vary substantially with an incremental increase in passengers at a fixed number of stations.

- 72.340. What will be the increase in SamTrans operational costs each year?

**Response.** SamTrans operational maintenance costs shown in these documents are for BART operations only. A "SamTrans bottom line" includes many elements other than BART operations, and is not shown in the DEIR/SDEIS.

- 72.341. What will be the increase in CalTrain operational costs each year?

**Response.** Please refer to Response 11.5 for a discussion of CalTrain operations costs.

- 72.342. Each alternative depends on \$301 million from Section 3 New Starts Funds, \$98 million in State TCI Funds and \$99 million in SamTrans funds....Over the last six fiscal years Congress has given BART a total of \$278.5 million. Portions of that were for the Dublin and Colma extensions and...for a BART garage someplace. In the last two years the appropriations have been \$28 million and \$20 million respectively....BART should come clean on this \$301 million and tell the truth. It just is not there.

**Response.** The \$301.0 million in Federal New Starts funds (49 U.S.C. Section 5309) was authorized by the Intermodal Surface Transportation Act (ISTA) of 1991. The BART extension has received a total of \$55.5 million from Federal New Starts appropriations made to date. Once the FEIR/FEIS is approved and a full funding grant agreement is executed, BART expects annual

appropriations to increase considerably until the entire \$301.0 million is received. Appropriations to the project in recent years have been at pre-construction levels, and will increase when construction is under way. BART has received nearly \$122 million in annual TCI funds since 1988, or an average of approximately \$20 million per year. Over the same period, BART has received approximately 18 percent of total statewide TCI funding.

- 72.343. Exactly how much TCI funding has there been made available each year since 1988? How much of that has been allocated to BART each year?

**Response.** BART has received nearly \$122 million in annual TCI funds since 1988, or an average of approximately \$20 million per year. Over the same period, BART has received approximately 18 percent of total statewide TCI funding.

- 72.344. In Table 6-3 [of the DEIR/Technical Appendix], the \$98 and \$99 figures for these should be \$98.3 if the statement on page 6-9 is correct. Of course, this will not equal the \$197 now shown between the two entries.

**Response.** Project costs include completion of the Alternatives Analysis (1992). The \$2 million AA expense was covered by a federal Section 9 grant (75 percent) with SamTrans providing the 25 percent local match. The state did not participate in this element of project cost, resulting in the discrepancy between SamTrans participation at \$98.7 million and TCI funds at \$98.3 million.

- 72.345. In Table 6-4 [of the DEIR/Technical Appendix], again the State TCI and SamTrans funds should be the same and their percentages on Table 6-5 should be the same for each entry but not the same for each alternative.

**Response.** Please refer to Response 72.344 for a discussion of amounts contributed by SamTrans and the State.

- 72.346. On page 6-9 [of the DEIR/Technical Appendix], explain "To date, the CTC has allocated \$132 million towards this commitment (Phase I extensions), including \$14.6 million for the BART San Francisco Airport Extension." Where is this \$117.4 million differential shown on Table 6-4?

**Response.** The \$117.6 million is allocated to BART's East Bay and Colma Extensions.

- 72.347. On page 6-9 [of the DEIR/Technical Appendix], has SamTrans yet contributed the \$196.9 million it committed to in its 1990 Cooperative Agreement Pertaining to BART System Extension?

**Response.** SamTrans committed \$196.9 million to the San Francisco Airport Extension in 1992, as its contribution to providing rail service to residents of San Mateo County. This amount was defined by 25 percent of the cost of the 1992 Base Case Alternative. Please refer to Response 72.348 for a discussion of the transfer of certain SamTrans funds to BART's East Bay Extensions.

- 72.348. On page 6-9 [of the DEIR/Technical Appendix]. What are SamTrans' other financial commitments to BART and CalTrain?

**Response.** Per the BART-SamTrans Comprehensive Agreement, SamTrans has committed to provide \$130 million for BART's East Bay Extensions as a buy-in to the capital investment made

by the three counties of the BART District. In addition, Section IV(E) of the BART-SamTrans Comprehensive Agreement stipulates that for each dollar in State TCI funds made available to the San Francisco Airport Extension, SamTrans will transfer a dollar from its commitment to the San Francisco Airport Extension to BART's other Phase I extensions. According to the MTC Resolution No. 1876 funding plan, the SFIA Extension will receive \$98.3 million in TCI funds and SamTrans will, in turn, transfer \$98.3 million from its San Francisco Airport Extension commitment to BART's East Bay Extensions. This fund transfer is already in place on the Colma Extension, where the CTC has contributed \$21.3 million to the project's \$170.2 million budget, and SamTrans has contributed \$21.3 million to BART's East Bay extensions.

72.349. On page 6-10 [of the DEIR/Technical Appendix], in 1991 dollars, exactly how much are Colma, South San Francisco and San Bruno expected to contribute towards that \$130 million?

**Response.** Please refer to Response 19.21 for a discussion of the role of the cities in funding the project.

72.350. Don't Millbrae and Burlingame play in this game?

**Response.** Please refer to Response 19.21 for a discussion of the role of the cities in funding the project.

72.351. How are your ongoing discussions proceeding with the various city governments on the availability of local resources?

**Response.** Please refer to Response 19.21 for a discussion of the role of the cities in funding the project.

72.352. On page 6-11 [of the DEIR/Technical Appendix], per discussions with staff, I believe you are supposed to place an X in the last column at County Sales Tax and Federal Highway Funds.

**Response.** An "X" has been placed in Table 6-6 to indicate that State Highway Account Funds can be used for Highway and Streets Operations/Maintenance. County Sales Tax and Federal Highway Funds will not be used for Highway and Streets Operations/Maintenance.

72.353. In Table 6-7 [of the DEIR/Technical Appendix], BART should give us a clue if these were 1992 dollars (when the first report was issued), 1993 dollars (first revenue column), 1994 dollars (when the last report was issued), 1995 dollars (the year the DEIS/DEIR was issued), or 1998 dollars (second revenue column).

**Response.** Dollars are shown in year of collection, either 1993 or 2010, as shown.

72.354. Who exactly gets to approve bridge toll increases?

**Response.** Bridge toll increases could be approved by the Governor and Legislature, but would probably be taken to the voters for approval.

72.355. In Table 6-8 [of the DEIR/Technical Appendix], it seems to imply that the 52 cent fare surcharge would be per each entrance and exit at stations South of Daly City. Does that mean someone boarding at South San Francisco would pay the extra 52 cents and then when she gets out at SFIA she would pay another 52 cent surcharge?

**Response.** A surcharge, if imposed, would be charged once per one-way ticket that began or ended at the Hickey Station, the Tanforan Station, or the Millbrae Station, and did not pass through the Transbay tube. A one-way ticket between two San Francisco Airport Extension stations would be subject to one surcharge, not two.

- 72.356. In Table 6-10 [of the DEIR/Technical Appendix], how did BART come up with these figures? For example, the Annualized Capital Costs of \$19.90 came from dividing what by what? If you say you used patronage figures, you will have to explain which passengers, those boarding BART on the peninsula, once or twice per day, etc.?

**Response.** BART staff, in consultation with MTC staff, prepared the cost effectiveness index. The index is computed as a ratio in which annualized capital and operating costs comprise the numerator, and ridership changes constitute the denominator. Travel time savings are converted to their monetary equivalent using a standard value of time and are incorporated in the index as a cost offset. The index represents an incremental cost (annualized capital and operating less travel time offsets) per new transit trip.

The figure of \$19.9 million is derived by estimating the cost of the Colma extension construction, minor CalTrain improvements, ALRS connection to a BART station, and roadway improvements as described in the TSM project description, annualizing each over the expected life of the project, and summing them.

Annual linked transit trips cost was calculated by annualizing the number of weekday work and non-work trips made anywhere in the region, as determined by the MTC regional model. A linked transit trip is a one-way trip made on transit, without regard to the number of transit modes used.

- 72.357. In column 5, how much was an hour worth and what was the time saved? These figures seem to be falling out of the air suddenly.

**Response.** The value of time, per FTA guidelines in effect prior to October 1995, is \$4.00 per hour for work hours, and \$2.00 per hour for non-work hours. These values were determined in 1984, and were fixed to allow projects in various parts of the country and over time to be effectively compared.

- 72.358. On page 7-2 [of the DEIR/Technical Appendix], the comment period is from January 13 to March 14, 1995.

**Response.** The commentor's point relating to the public comment period is correct. To clarify this, page 7-2, paragraph one, sentence three, is amended as follows:

In addition, written comments on the DEIR/SDEIS will be accepted during the public comment period from January 13 to March 14, 1995, and verbal comments can be voiced at the public hearing to be held during this comment period.

- 72.359. On page 7-3 [of the DEIR/Technical Appendix], where did BART get this 57 percent figure to break out "high minority" neighborhoods?

**Response.** This figure is based on U.S. Census Bureau data which showed that in 1990, the overall population for northern San Mateo County was 51 percent minority. BART assumed a factor of 10% for normal fluctuations in population distribution, which would indicate an "average" minority percentage for northern San Mateo County would be  $51 \pm 5.1\%$  (i.e., between

45.9% and 56.1%). On this basis, BART assumed that a northern San Mateo neighborhood would be considered "high-minority" if over 57 percent of its residents are minorities.

- 72.360. On page 7-9 [of the DEIR/Technical Appendix], Table 7-1 [of the DEIR/Technical Appendix], you show a population of 670 in the Fifth Addition. I apologize for not having the time to cite you the page but this is definitely not in keeping with the population information you provided earlier.

**Response.** It is unclear what other population figure the commentor is referring to as being in conflict with the 670 person figure for the Fifth Addition neighborhood. Land Use (Section 3.2) of the DEIR/Technical Appendix discusses the Fifth Addition neighborhood, but does not summarize the residential population. The figure of 670 was published by the U.S. Census Bureau for the Fifth Addition neighborhood in 1990.

- 72.361. Page 4, Figure 1 [of the Design Appendix], Bottom - The 1600 feet should probably be 1620 as shown on page 25.

**Response.** Page 4 of the Design Appendix shows the LPA alignment and page 25 shows the Base Case alignment. The figures for the length of the cut-and-cover subway are correct in each case. The double arrowhead at the end of the leader indicates the dimension is to a point beyond the end of the leader, 20 feet beyond in this case. Therefore, there is no discrepancy between the two numbers.

- 72.362. How close is this cut-and-cover to Colma Creek?

**Response.** The distance between the subway box and Colma Creek varies between 50 and 100 feet.

- 72.363. Page 8, Figure 5 [of the Design Appendix] - This is an excellent opportunity for BART to alter its route and go down El Camino Real thus saving many homes and residences.

**Response.** Figure 5 of the Design Appendix shows a portion of the 1992 LPA alignment from Kaiser Hospital to 300 feet south of Chestnut Avenue, where the proposed BART alignment is approximately 150 feet east of El Camino Real. The commentor proposes leaving the SPTCo San Bruno branch at this point to follow the El Camino Real (State Highway 82) right-of-way as an alignment for "saving many homes and residents."

The Caltrans El Camino Real right-of-way is approximately 100 feet wide from Chestnut Avenue in South San Francisco through San Bruno to Millbrae. In this stretch, property on both sides of El Camino Real is built out with strip commercial development (restaurants, gas stations, motels, neighborhood shopping centers, cemeteries, etc.). BART requires a minimum of 45 feet of right-of-way and up to 120 feet during construction. There is insufficient right-of-way within the 100 foot +/- El Camino Real Caltrans property to build BART without acquiring parcels on one side or the other of El Camino Real.

This does not include acquisitions that would be required for stations. BART suburban stations typically require 15- to 25-acres for station and parking facilities. By far the majority of residential and business acquisitions associated with the various BART alternatives under study in the DEIR/SDEIS occur at station sites. One or two 15- to 25-acre station sites along El Camino Real would require substantial acquisitions. The combination of acquisitions on one side of El Camino Real for the alignment and construction, and 15- to 25-acres for one or two station sites, would require more property takes than currently under consideration in the DEIR/SDEIS. Further, a

BART alignment along El Camino Real conflicts with the South San Francisco, San Bruno, and Millbrae general plans.

- 72.364. Page 11, Figure 8 [of the Design Appendix], Top - Where is the traction power substation as shown on page 109?

**Response.** The traction power substation shown on page 109, Figure 3 is part of the Tanforan Station and as such is not called out separately from the station on the plan and profile drawings. The traction power substation is located in the vicinity of BART stations 290+00 and 291+00 on the San Francisco Water Department property east of the existing Post Office.

- 72.365. Page 11, Figure 8 [of the Design Appendix], Bottom - The at-grade portion has a bunch of gaps with the existing ground. Does this mean you will be doing a lot of grading for those 1900 feet starting on page 10?

**Response.** Gaps between the lines representing existing ground and the lines representing the top of rail (both at the centerline of the BART track) are shown in Sections G1 and G2 on Figure 2, page 90 of the Design Appendix. Figures 7 and 8, pages 10 and 11, of the Design Appendix indicate that it would be necessary to construct a low embankment for approximately 1,500 feet north of the Tanforan Station.

- 72.366. Page 11, Figure 8 [of the Design Appendix], Top - Figure 3A shows this station as covering the tracks but they are visible on this page.

**Response.** On plan and profile drawings, the track centerlines continue as solid lines regardless of whether or not they would be physically covered in the built project.

- 72.367. Page 11, Figure 8 [of the Design Appendix], Bottom - The listing of alternatives in the middle should include Alternative III as shown on page 109.

**Response.** The commentor is correct. Alternative III has complete plans and profile drawings beginning on page 25 of the Design Appendix and does not rely on any of the figures for the LPA. The Tanforan Station under this alternative is shown on page 32.

- 72.368. Page 11, Figure 8 [of the Design Appendix], Top - Shouldn't you show the garage at this station?

**Response.** The garage shown on page 109, Figure 3 of the Design Appendix is part of Tanforan Station and, as such, is not called out separately from the station on the plan and profile drawings. For this reason, a reference to the Tanforan Station Site Plan and Section is indicated above the graphic scale on page 11, Figure 8. Additional station details are shown on pages 105 through 138.

- 72.369. Page 12, Figure 12 [of the Design Appendix], Top - At the left you need a portal on the track.

**Response.** The commentor is correct. The portal location is now shown in the lower profile section.

- 72.370. Page 15, Figure 12 [of the Design Appendix], Top - How do the trains get over to that wash building which is a good hundred feet from the nearest track?

- Response.** The wash building contains the required pumps and equipment to operate the car wash facility which is shown on page 16, Figure 13 of the Design Appendix. Train washing takes place in the tailtracks just south of the wash building, not at the Wash Building.
- 72.371. Page 15, Figure 12 [of the Design Appendix], Bottom - The 2150 feet should probably be 2100.
- Response.** The commentor is correct. The at-grade storage tracks (Section-M) length on page 15, Figure 12 of the Design Appendix is revised from 2150 to 2100 feet.
- 72.372. Page 18, Figure 1 [of the Design Appendix], Bottom - Portion at left is not the same as on page 11. This is supposed to be at grade and this is also higher than on page 11.
- Response.** The commentor is correct. If the alternative shown on page 18 is selected, the profile will require modification.
- 72.373. Page 18, Figure 1 [of the Design Appendix] - Is this station built on up to 20 feet of fill?
- Response.** The station will not be built on up to twenty feet of fill. The profile indicates that there will be from ten to twenty feet of station structure below the BART tracks at this point. A section through the BART station would look similar to the section shown on page 114 of the Design Appendix.
- 72.374. Page 18, Figure 1 [of the Design Appendix] - Shouldn't this be a P section?
- Response.** The commentor is correct. Cross section O, on page 18, Figure 1 of the Design Appendix, is changed to Section P.
- 72.375. Page 18, Figure 1 [of the Design Appendix] - Will the folks adjacent to Huntington and Scott be looking up to a double bent?
- Response.** The commentor is correct. Onlookers adjacent to Huntington and Scott would be looking up to a double bent, as shown in Section O on page 92.
- 72.376. Page 18, Figure 1 [of the Design Appendix] - The elevation match line at 316+00 does not match the elevation on page 19.
- Response.** The elevations along the right-hand edge of the profile on page 18 are off by 20 feet. Please refer to the elevations along the left-hand edge of this page.
- 72.377. Page 19, Figure 2 [of the Design Appendix] - Will those steel wheels screech much during this aerial descent?
- Response.** Steel transit wheels do not screech when leaving an aerial structure. Please see Response 72.279 for a discussion of noise and steel wheels.
- 72.378. Page 20, Figure 3 [of the Design Appendix] - This needs to show Colma Creek.
- Response.** Colma Creek does not appear on this page. These are drainage canals. Colma Creek last appears at Chestnut Avenue on Page 8, Figure 5, where the creek turns away from the BART alignment and runs southeasterly to the bay.

72.379. Page 20, Figure 3 [of the Design Appendix] - Isn't the Traction Power Substation being built on top of Colma Creek?

**Response.** After Colma Creek is realigned its old stream bed area would be available for construction of the traction power substation as shown.

72.380. Page 20, Figure 3 [of the Design Appendix] Bottom - At the far right, is that really an at grade section? Should almost be a P...

**Response.** This is an at-grade section and would be similar to Section G3. The actual section at this point would be an at-grade section in a slight cut. The depth of cut at this point would be unsupported and shallow enough so as not to require a reinforced concrete structure for support.

72.381. Page 22, Figure 5 [of the Design Appendix] Bottom - At the far left you should show that it is 250 feet.

**Response.** The commentor is correct. The figure "250" has been added under the text "AIRPORT INTERMODAL STATION." In addition, the figure "700" at the end of the profile on Figure 4, Page 21, of the Design Appendix is changed to read "450."

72.382. Page 22, Figure 5 [of the Design Appendix] - Once again, how do you get the cars to the wash building located so far away and with no tracks leading to it?

**Response.** Please refer to Response 72.370 for a description of the car wash.

72.383. Page 25, Figure 1 [of the Design Appendix], Bottom - The 1620 should be 1600 feet according to page 4.

**Response.** Please refer to Response 72.361 regarding the length of the segment.

72.384. Page 26, Figure 2 [of the Design Appendix] - Either the top should show the location of Colma Creek or the bottom should not have a Q track. On page 93, that is supposed to have the creek immediately to the East of the track.

**Response.** Typical Section Q applies at this point, where resilient ties are required. Since Colma Creek is not at this location, the Colma Creek reference should be ignored.

72.385. Page 27, Figure 3 [of the Design Appendix] - Either the top should show the location of Colma Creek or the bottom should not have a Q track. On page 93, that is supposed to have the creek immediately to the East of the track.

**Response.** Please refer to Response 72.384 regarding applicability of Q track.

72.386. Page 27, Figure 3 [of the Design Appendix], Bottom - At 170+00 the creek is on the wrong side of Section Q.

**Response.** The sections are taken looking down station. Section Q is a generic section and is intended to apply at all areas of retained cut where resilient ties are required. In addition, the required amount of freeboard above Colma Creek overflow during a 100-year flood is shown. To

show sections that were correct at every instance would require several additional pages to be added to this already large document and would not necessarily add to its clarity.

- 72.387. Page 30, Figure 6 - Either the top should show the location of Colma Creek or the bottom should not have a Q track. On page 93, that is supposed to have the creek immediately to the East of the track.

**Response.** Please refer to Responses 72.384 and 72.386 for a discussion of Colma Creek and Section Q.

- 72.388. Page 35, Figure 11 [of the Design Appendix] - Your alignment of the station between the top and the bottom is out of kilter.

**Response.** Your comment is noted. The location in the profile is correct, and the location in the plan view depicted on page 35, Figure 11 of the Design Appendix, is corrected.

- 72.389. Page 47, Figure 2 [of the Design Appendix], is the intersection of Montgomery and Walnut still going to be there? Page 115 shows it to be gone.

**Response.** If the I-380/San Bruno Station option were selected, the intersection and surrounding area would be replaced by the station. Figure 2 on Page 47 shows the existing condition and the proposed station location only. Figure 4.2 on Page 115 shows the proposed site plan for the entire development, which would require the removal of the intersection of Walnut Street and Montgomery Avenue.

- 72.390. Page 89, Figure 1 [of the Design Appendix], Section A - To be consistent with other...[figures] all these should have the outside dimension shown underneath.

**Response.** The comment is noted, and the drawing will be revised accordingly.

- 72.391. Page 89, Figure 1 [of the Design Appendix] - Should Section D have fences on either side of the steep trench?

**Response.** BART security fencing would not be required at these cut-and-cover subway locations. Existing property fencing would be left in place. Fencing is not required where the BART tracks are in subway. The ground surface would be reconstructed in this area to more or less match what existed prior to the BART construction.

- 72.392. Page 89, Figure 1 [of the Design Appendix], Section D - Should there not be some way for the rainwater to flow away?

**Response.** This is a section taken in a natural drainage channel. The path for the water would not be blocked by the construction. The drainage would be maintained during construction.

- 72.393. Page 89, Figure 1 [of the Design Appendix] - Should Section E have fences on either side of the mound?

**Response.** BART security fencing would not be required at these cut-and-cover subway locations. Existing property fencing would be left in place.

72.394. Page 89, Figure 1 [of the Design Appendix] - Section E should show a finish grade.

**Response.** The note indicating 3'-0" of cover in this conceptual drawing is adequate to show that fill material will be placed in this area to attain final grade.

72.395. Page 90, Figure 2 [of the Design Appendix] - Section F should show a finish grade (see Section G).

**Response.** Please refer to Response 72.394 for a discussion of finished grade.

72.396. Page 91, Figure 3 [of the Design Appendix] - Section H should show that the height varies.

**Response.** The commentor is correct. Dimensions similar to those shown on Section K are added to Section H on page 91, Figure 3 of the Design Appendix.

72.397. Page 91, Figure 3 [of the Design Appendix] - All the retained cuts on all the pages should show the underdrain as seen in Section Y.

**Response.** The retained cuts are shown accurately. The underdrain is used only for ballasted track, not for all retained cuts.

72.398. Page 91, Figure 3 [of the Design Appendix] only - Section J should have those boxes with the X in them. I believe those are the passenger escape platforms?

**Response.** The comment is noted. The areas representing emergency exits have been added to Figure 3, Section J of the Design Appendix.

72.399. Page 91, Figure 3 [of the Design Appendix] - Section K, do you really think three feet is adequate above a 100-year flood plain?

**Response.** In most cases, three additional feet of freeboard would provide adequate protection from a 100-year flood. The criteria for determining the freeboard above the design flood are still being studied for this extension. The exact freeboard distance and/or the flood frequency will be determined during preliminary engineering.

72.400. Page 93, Figure 5 [of the Design Appendix] - Sections Q and T have the same question for the Colma creek flood plain three-foot height.

**Response.** Please refer to Response 72.399 for a discussion of freeboard design standards.

72.401. Page 93, Figure 5 [of the Design Appendix] - Section U should show the relation to Colma Creek.

**Response.** Section U is intended to show the shape and dimensions of the retained cut section immediately prior to the Chestnut Station. The distance to Colma Creek is not relevant.

72.402. Page 94, Figure 6 [of the Design Appendix] - Section X, a retained cut, adjacent to Colma Creek, definitely needs that underdrain.

**Response.** As noted in Response 72.397, the underdrain is used only for ballasted track.

72.403. Page 95, Figure 7 [of the Design Appendix] - Section CC needs some dimensions.

**Response.** This section shows the varying relationship between one tunnel elevation and the other. Dimensioning is not required.

72.404. Page 95, Figure 7 [of the Design Appendix] - Section EE needs a height.

**Response.** This subway section shows the final configuration of the four subway boxes. This section is typical and intended to apply at several locations, so specific dimensions do not apply.

72.405. Page 95, Figure 7 [of the Design Appendix] - Section FF needs a height.

**Response.** This subway section shows the relationship between BART and the adjacent CalTrain tracks. Please refer to Section D for additional dimensions.

72.406. Page 95, Figure 7 [of the Design Appendix] - Section GG needs a height on the crash wall...Is a wall three feet, six inches wide, adequate to prevent a locomotive from crashing into a BART train.

**Response.** The wall height and other details will be determined during preliminary design. The details and dimensions will depend upon the design criteria.

72.407. Page 101, Figure 6 [of the Design Appendix] - This alignment is impossible....

**Response.** The plan view portion shows Herman Street where it becomes Forest Lane on the southerly side of I-380, and is revised to show that portion where the BART tracks cross Forest Lane/Herman Street as shown on Page 39 at approximately BART Station 322+00.

72.408. Page 109, Figure 3 [of the Design Appendix] - You need a traffic signal on Huntington at Sneath and at the station exit across from the Towne Center exit.

**Response.** A traffic signal would be placed at the intersection of Sneath Lane and Huntington Avenue as part of the design for the Tanforan Station under the 1992 LPA, and Alternatives III and V. This intersection would also be signalized under Alternative VI. Figure 3, Tanforan Station Site Plan, in the Design Appendix refers to the 1992 LPA and Alternatives III and V in which the intersection of Huntington and Tanforan Station Exit would be an unsignalized intersection. This is because analysis of this intersection calculated acceptable levels of service in the A.M. and P.M. peak hours.

Figure 3, and the other Station Site Plans, are intended to show major features and traffic circulation patterns.

72.409. Page 109, Figure 3 [of the Design Appendix] - The station platform is 100 feet too far to the left according to page 11.

**Response.** The station plans in the Design Appendix (pages 105 through 138) are schematic and intended to indicate the general location and relationship of station features. The platform is more precisely located on the plan and profile drawing on page 11, Figure 8 of the Design Appendix.

72.410. Page 110, Figure 3.A [of the Design Appendix] - Per figure 8, Maple Street should be over to the left more. The Street itself is not that close to the station proper.

**Response.** The position of the platform relative to the street is the same on both figures, and no correction to Figure 8 is necessary.

72.411. Page 110, Figure 3.A [of the Design Appendix] - What is the height of the station?

**Response.** This graphic section indicates an overall height to the top of the structure of approximately 34 feet. The actual dimensions will be developed during preliminary engineering and final design.

72.412. Page 110, Figure 3.A [of the Design Appendix] - The horizontal elevation should be higher at the far right than it is on the far left.

**Response.** The station plans in the Design Appendix (pages 105 through 138) are schematic and intended to indicate the general location of station features. The grade differential referred to by the commentor is not significant for schematic drawings.

72.413. Page 110, Figure 3.A [of the Design Appendix] - The roof structure does not cover outside the tracks according to pages 11 and 109.

**Response.** Page 110, Figure 3.A is consistent with page 109, Figure 3 and with page 11, Figure 8, although these figures show the station from differing perspectives and levels of detail. Page 11, Figure 8, shows only the platform, not the entire station, whereas both Figures 3 and 3A show the entire platform area. The roof structure covers both the platform and tracks in the central station area.

72.414. Page 111, Figure 3.B [of the Design Appendix] - I do not believe you are planning to have that second traffic signal where the buses would exit the garage. I believe I read it is too close to the entrance traffic signal.

**Response.** The Huntington/BART exit intersection under Alternative VI as indicated in Figure 3.B, Tanforan Station Site Plan, in the Design Appendix would be signalized. The traffic signal would have three phases that would separate the automobiles exiting from the buses and kiss-and-ride vehicles exiting just north of the park-and-ride exit. The equipment with the traffic signals would be placed at multiple locations to provide visibility to drivers approaching or waiting at the intersection.

However, the design of the Tanforan Station has been revised under the Alternative VI LPA and the Aerial Design Option LPA such that the BART parking garage and the bus bay facility would each have their own entrance/exit. Please refer to Response 17.5 for further discussion of the revised Tanforan Station Design.

72.415. Page 111, Figure 3.B [of the Design Appendix] - Does BART intend to improve the shopping center access/egress road south of the garage?

**Response.** The road labeled as access/egress in Figure 3.B in the Design Appendix is the Tanforan Driveway South, and the intersection of this roadway with Huntington Avenue was studied under Alternative VI. Huntington Avenue would be improved with northbound left-turn

lanes on Huntington Avenue for traffic turning onto Tanforan Driveway South under Alternative VI.

Please refer to Response 72.416 for a discussion of level of service at this intersection.

- 72.416. Page 111, Figure 3.B [of the Design Appendix] - Shouldn't there be a traffic signal on Huntington at this access/egress road?

**Response.** The level of service at the Huntington/Tanforan Driveway South intersection would be LOS (Level of Service) A during the A.M. peak hour and LOS E during the P.M. peak hour under the No Build Alternative in 2010, while under Alternative VI the level of service would be LOS A during the A.M. peak hour and LOS D during the P.M. peak hour in 2010. Improvements made to Huntington Avenue as part of the design of Alternative VI would improve operations at this intersection during the P.M. peak hour.

- 72.417. Page 111, Figure 3.B [of the Design Appendix] - Shouldn't there be a traffic signal on Huntington at Forest so that traffic does not back up in front of the garage?

**Response.** The intersection of Huntington/Forest does not require a traffic signal under Alternative VI. Queuing from this intersection would not interfere with operations of the shopping center/BART garage or with the intersection of Huntington/Tanforan Driveway South. Please also refer to Response 72.110 for information on the Huntington/Forest intersection.

- 72.418. Page 112, Figure 3.C [of the Design Appendix] - Does BART really intend to have its handicapped parking on L2 BART Parking Level and insist that the handicapped take an elevator down to the bridge level?

**Response.** As shown, the accessible route provided is the same as that used by the majority of BART patrons and employees. Depending on the type of operational controls implemented to segregate the BART parking from the Tanforan Shopping Center Parking, it may be possible to facilitate BART-accessible parking at the bridge level.

- 72.419. Page 112, Figure 3.C [of the Design Appendix] - According to the graphic scale your autos are four-feet wide and 13 feet long.

**Response.** The cars in Figure 3.C are shown to scale at significantly more accurate dimensions than those estimated by the commentor. The graphic scale is approximate as it relates to the depiction of automobiles.

- 72.420. Page 112, Figure 3.C [of the Design Appendix] - Is the right portion of the garage correct? It is only 40 feet wide and you show two cars parked end to end with a drive through lane.

**Response.** The station plans in the Design Appendix (pages 105 through 138) are schematic and intended to indicate the general location of station features. As shown, the east portion of the garage adjacent to the escalators is not wide enough for double-loaded 90 degree parking.

- 72.421. Page 112, Figure 3.C [of the Design Appendix] - According to your scale the bus is only eight feet wide and the section for it is 28 feet wide.

- Response.** The bus is shown to scale. Please refer to Response 72.420 regarding the intended use of the station plan.
- 72.422. Page 112, Figure 3.C [of the Design Appendix] - That 16 foot height is adequate for the buses which, as I showed at the public hearing need 11 feet six inches. Unfortunately the available height in the Tanforan Shopping Center garage is only six feet, seven inches.
- Response.** The existing Tanforan Shopping Center parking structure would be demolished and rebuilt to accommodate the vertical clearance requirements of the SamTrans buses.
- 72.423. Page 112, Figure 3.C [of the Design Appendix] - How does BART intend to rid itself of the diesel fumes from 12 buses in that garage at one time? You have to remember that the Daly City station is somewhat similar but it is open to the elements and smaller.
- Response.** The station plans in the Design Appendix (pages 105 through 138) are schematic and intended to indicate the general disposition of station features. Ventilation requirements will be addressed during preliminary engineering.
- 72.424. Page 112, Figure 3.C [of the Design Appendix] - Crossing over the bridge I wonder if it really does have a roof? I'll tell you, the wind blows through there so badly that you will need walls on it too.
- Response.** Overhead covering and wind protection will be provided in accordance with the BART Design Criteria for pedestrian overpasses.
- 72.425. Page 112, Figure 3.C [of the Design Appendix] - Why do you need a 24 foot swath between Huntington and the station proper at street level?
- Response.** This area is for the escalator and stairs leading up to the mezzanine and for BART ancillary rooms (public rest rooms, staff locker and break rooms, janitor's room, etc.).
- 72.426. Page 112, Figure 3.C [of the Design Appendix] - Are the station platforms correct at six feet in depth?
- Response.** The platform is shown correctly. The platform is 28 feet wide, 700 feet long, and 3 feet 3 inches above the top-of-rail elevation.
- 72.427. Page 112, Figure 3.C [of the Design Appendix] - Are your trains going south in the right lane and north in the left lane?...Look at all the photos in the DEIS/DEIR and you will see that the train operators work on the right side of the train as it heads down the tracks. They stop the train then cross over and look out the window on the platform side before they close the doors.
- Response.** The train elevations are incorrect. The east track would be northbound and the west track would be southbound.
- 72.428. Page 112, Figure 3.C [of the Design Appendix] - Is that some sort of roof just above the cars in the station? Looks like you intend to solidly cover the station platform?
- Response.** The horizontal lines above the BART trains represent trackway structure beyond the section cut. The floor of the mezzanine level provides a "roof" for the platform level. Typically,

weather protection is provided for at least one-third (approximately 240 feet) of the platform length.

- 72.429. Page 112, Figure 3.C [of the Design Appendix] - The elevation between Huntington Avenue East and the bottom of those station stairs on the right, if at the current grade, should be at least 10 feet...From left to right, the slope of this should drop approximately 30 feet to Huntington Avenue East.

**Response.** The existing site does have an appreciable slope with grade at Huntington Avenue East lower than grade at the face of the existing Tanforan Shopping Center parking structure. New finish grade elevations in the station area will be developed during preliminary design.

- 72.430. Page 113, Figure 4.1 [of the Design Appendix] - I believe CalTrain is in a shallow cut according to page 2-41 and it is showing here above the elevated BART tracks.

**Response.** Figure 4.1, on page 113, indicates that the CalTrain platform is 12 feet below grade and that the BART tracks are aerial. The section on page 114, Figure 4.1A clarifies these features.

- 72.431. Page 115, Figure 4.2 [of the Design Appendix] - Will the traffic coming south on Huntington really enter that San Bruno Avenue intersection at an angle as shown?

**Response.** The crossing on Figure 4.2 at page 115 shows these intersections at nearly right angles. The approach to the intersections is angled.

- 72.432. Page 115, Figure 4.2 [of the Design Appendix] - Where is the other part of Huntington at the right edge of this sheet?

**Response.** Figure 4.2 is corrected to show the continuation of Huntington Avenue.

- 72.433. Page 115, Figure 4.2 [of the Design Appendix] - The right vent shaft should really be in the middle of that triangle at San Bruno Avenue, San Mateo Avenue and Huntington.

**Response.** As shown, the vent shaft can be integrated into the overall station design. It would be more obtrusive in the location proposed by the commentator and would not vent the subway properly.

- 72.434. Page 115, Figure 4.2 [of the Design Appendix] - The entire station is too far to the left on this page.

**Response.** The station location shown on page 115, Figure 4.2 of the Design Appendix is correct.

- 72.435. Page 116, Figure 4.2A [of the Design Appendix] - Am I seeing things or does a handicapped person exiting a BART train have to take Elevator A to the mezzanine level, get out, go to Elevator B, take that to the parking garage level, get out, go to Elevator C, take that to the sidewalk and then merrily roll on home?

**Response.** The bus bays are accessible from the BART mezzanine (at grade, requiring no elevator transfer). The accessible parking shown at grade can be reached by the route described, or by exiting at the west side of the station at grade, and proceeding around to the east side.

Accessible parking would also be provided in the parking garage at the bridge level (requiring only one elevator transfer).

- 72.436. Page 117, Figure 4.3 [of the Design Appendix] - Will the traffic coming South on Huntington really enter that San Bruno Avenue intersection at an angle as shown?

**Response.** Please refer to Response 72.431 regarding the intersection of Huntington and San Bruno Avenues.

- 72.437. Page 118, Figure 4.3A [of the Design Appendix] - With the addition of the Airport LRS, you are adding even more distance for the handicapped to travel.

**Response.** All alternative station concepts developed for the Airport Station require every patron to transfer to the ALRS from BART, with the exception of Alternative VI. In this alternative, over 75 percent of the patrons can have direct access to the terminal ticketing and boarding areas without using the ALRS. In any case, handicap elevators are provided for all vertical level changes.

- 72.438. While on the ALRS subject, might it be possible to have it run around the parking garage inside an upper level? This will not impact the homes across the street on Angus and on Third so severely.

**Response.** The specific design details for running the ALRS to and from the Airport to serve the Downtown San Bruno Station location have not been developed to sufficient degree to determine the final alignment. It may be possible to incorporate the ALRS guideway on top of the parking structure and avoid further impacts on the residential neighborhood if this station location were to be adopted.

- 72.439. Alternative V-B would benefit San Bruno most of all and would benefit San Bruno dramatically. I strongly endorse adoption of the Alternative V-B option for the BART Airport Expansion.

**Response.** The commentator's support for Design Option V-B is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). Nevertheless, thank you for your active interest in the project.

### 73. BOYD, DONALD W.

- 73.1. End BART at Colma. Extend CalTrain to the Airport and make the connection with BART in San Francisco.

**Response.** The commentator's opposition to extending BART south of Colma is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. As noted in Response 2.7, the Alternative VI Aerial Design Option was selected as the LPA by both boards. Background studies justifying the need for a rail project south of Colma are described in Response 79.18. Please also refer to Response 54.18 for a discussion on public support for extension of BART to SFIA.

74. BRACKER, JESSIE

- 74.1. I have found many Errors and many Omissions in this DEIR/SDEIS document, especially regarding traffic, Significant Social Impacts and housing depletion counts, with Safety, Health and Welfare left out in Alternatives IV and V in Millbrae...

**Response.** Specific concerns identified by the commentor are addressed in the responses below. The commentor's general statement regarding public safety, health, and welfare impacts under Alternatives IV and V are covered in Sections 3.1, Transportation; 3.2, Land Use and Economic Activity; 3.5, Community Services and Facilities; and in the DEIR/SDEIS in 3.6, Geology, Soils, and Seismicity; 3.10, Air Quality; and 3.11, Public Health and Safety.

- 74.2. March 15, 1994,...Steering Committee voted to include Alternative VI...[and] exclude the Center St. Station in Millbrae. Why wasn't it excluded and why was another Station alternative added to Center Street and without any accurate listing of Significant Social Impacts?

**Response.** Alternatives IV and V are the only alternatives under study in the DEIR/SDEIS that include a Millbrae Intermodal Station at Center Street. Alternatives IV and V were part of the original set of alternatives approved by the project Steering Committee at the public meeting on August 20, 1993 for study in the DEIR/SDEIS. The BART extension Steering Committee for the DEIR/SDEIS is composed of four members each from the BART and SamTrans boards of Directors.

On March 15, 1994, at another public meeting, the Steering Committee approved Alternative VI for study and inclusion in the environmental documents for the proposed extension. The Steering Committee did not take any action at the March 15th meeting, or at any other meeting, to exclude Alternatives IV and V and/or the Millbrae Intermodal (Center Street) Station from further consideration in the DEIR/SDEIS.

In another action, on February 22, 1994, the Millbrae City Council passed Resolution No. 94-19, urging the Steering Committee to include a Millbrae Avenue Station alternative and to exclude the Center Street alternative from the Environmental Impact Report/Alternatives Analysis Study.

All alternatives/stations were selected for study in the DEIR/SDEIS before the document was prepared and an evaluation of significant social impacts was documented. Alternatives IV and V are fully evaluated, with an accurate listing of significant social impacts, in the DEIR/SDEIS. CEQA requires that lead agencies identify only significant effects on the environment and propose feasible mitigation for such effects. Economic or social effects of a project are not treated as significant effects on the environment under CEQA. However, in the interest of providing the public with a broad range of information about the project, BART has included in the DEIR/SDEIS analysis and projections of the project's social and economic effects. Please refer to chapters 3 (Environmental Analysis), 4 (Other CEQA/NEPA Topics), 5 (Section 4(f) Evaluation), and 7 (Environmental Justice) of the DEIR/Technical Appendix for more information. In addition, the commentor is referred to Response 74.15 for additional discussion of the history of selecting the Millbrae Intermodal Center Street Station for evaluation in the DEIR/SDEIS.

It should also be noted that the Center Street tailtrack is associated with a Station/Parking in a wetlands and habitat area. This concept has been rejected by resource agencies, thus, a Millbrae Station design is environmentally superior.

- 74.3. Goals and Objectives have not been met (in Tables 1-2, Page 1-9) in DEIR[/]Technical Appendix.

**Response.** Please refer to Response 14.7 for a discussion of goals and objectives.

- 74.4. ... "Pro Argument Measure K"...dated Aug. 21, 1987...reads-in part- quote "This alignment would not impact any homes or commercial properties..." ...Why does this document show such a great many Impacts and Removals of Homes? And some Businesses?

**Response.** Please refer to Response 54.18 for a discussion of "Measure K."

- 74.5. San Mateo Co. Peninsula Residents already have a very good, fast, reliable, safe "CalTrain" ....

**Response.** Please see Response 79.18 for an overview of the studies conducted evaluating various proposals to extend BART to the Airport. Based on these studies, the BART and SamTrans boards have concluded that CalTrain alone does not meet the project requirements. As a result, the boards have selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the selection process). As noted in Response 2.7, extension of BART to the SFIA does not preclude further improvements to CalTrain.

- 74.6. BART Trains Tracks should end at Colma and Luxury Express Shuttle Buses should take riders to the Airport...

**Response.** The commentor's opposition to extending BART south of Colma is noted. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (see Response 2.7 for a discussion of the LPA selection process). Please also refer to Response 54.18 for a discussion on public support for the extension of BART to SFIA.

- 74.7. Page S-16 [of the Executive Summary]: Under Millbrae---Areas of Controversy Critical Social and Economic Implications---Many things need to be added, which have been omitted:

**Response.** The areas of controversy shown on page S-16 of the Executive Summary highlight critical social and economic implications of the proposed extension by jurisdiction. This summary is a representative listing of major concerns of local communities, groups, or organizations. It is not intended to be an all-encompassing, fully-exhaustive list of every concern. Please refer to Table S-7, Comparison of Key Impacts, in the Executive Summary for more detail on key impacts and potential areas of controversy.

- 74.8. [Page S-16 of the Executive Summary, Millbrae, 1st bullet]: Add words---under alternatives I-380, LPA, II, III, IV, and V at Millbrae's Marina Vista, North Millbrae, and Airport Park areas because of BART TAIL TRACKS and/or Stations. (Alternative VI affects Bayside Manor area)

**Response.** The impacts listed on page S-16 under Millbrae are meant as general impacts pertaining to all construction-related activities in Millbrae. The commentor's edits are too specific for inclusion in the Executive Summary and would not be consistent with the characterization of other impacts. Alternative VI construction impacts mentioned by the commentor are addressed on page 3.13-66 in Section 3.13, Construction, of the DEIR/Technical Appendix.

- 74.9. [Page S-16 of the Executive Summary, Under Millbrae] 2nd, 3rd, 4th dot: Add as correction---(after VI),- and design option V-B.

- Response.** Design Option V-B has a terminus station in San Bruno and tailtracks that end north of the San Bruno/Millbrae city limits. Design Option V-B is not expected to have the impacts in Millbrae identified in the second, third, and fourth bullets.
- 74.10. [Page S-16 of the Executive Summary, under Millbrae] ---ADD---Loss of Marino Vista Park at Bay St. and Registered Historical Millbrae Nursery School on Center St. Both Unavoidable Significant Impact/Mitigation.
- Response.** The displacement of Marino Vista Park is listed as a significant impact on page S-17 of the Executive Summary. Please refer to Response 16.47 for information on the historical status of Millbrae Nursery School.
- 74.11. [Page S-16 of the Executive Summary, Under Millbrae]---ADD---Change of zoning for Marino Vista which is zoned R2, and does not have multiple housing. Not consistent with Millbrae General Plan. Unavoidable Significant Impact.
- Response.** Page S-16 of the Executive Summary does not concern unavoidable significant impacts, but rather "areas of controversy." Moreover, BART does not change a local jurisdiction's zoning designations.
- 74.12. [Page S-16 of the Executive Summary, Under Millbrae]---ADD---Filling of Open Space zoned Flood Lands inhabited by Red-legged frog, Damsel Fly, and San Francisco Garter Snake...Unavoidable Significant Impact under Alternative LPA, I-380, II, III, IV, V and possibly V-B.
- Response.** The loss of wetlands and habitat for the San Francisco garter snake and California red-legged frog is listed on page 5-16 of the Executive Summary under "SFIA Property west of Highway 101." This statement highlights the concern over sensitive species, which are discussed in detail in the Biological Assessment and Biological Opinion in Volume V of this FEIR/FEIS.
- 74.13. [Page S-16 of the Executive Summary, Under Millbrae]---ADD---Safety, Health, and Welfare of residents living in more than 200 homes...will be destroyed by Isolation and Destruction of streets.
- Response.** Pages S-19 and S-31 of the Executive Summary state that there would be significant unavoidable impacts on the Marino Vista and North Millbrae neighborhoods if the Millbrae Intermodal Station is built at Center Street.
- 74.14. ---ADD---New Freeway 101 On/Off ramps into BART Parking Garage at Center St. and Bay destroying traffic safety for motorists, bicyclists and/or pedestrians in three (3) cohesive neighborhoods, namely, -Marino Vista/North Millbrae and Airport Park. - under Alternative IV and V with Unavoidable Significant Impact. - Mitigation (Both during and after construction.)
- Response.** Please refer to Response 74.13 regarding disturbances to Millbrae neighborhoods under Alternative IV and V. The DEIR/SDEIS does not, however, indicate the same impacts for Airport Park as for Marino Vista/North Millbrae. Accordingly, Airport Park is not listed on the pages referenced in Response 74.13.
- 74.15. There was no public Participation or discussion of Social, Economical Impacts prior to adoption of adding a Millbrae Station at Center St., to Alternatives IV and V by Steering Committee....

**Response.** The following is a chronology of events leading to the decision to include the Millbrae Intermodal Station in two of the six alternatives carried forward in the DEIR/SDEIS.

- At the July 8, 1993 Public Scoping Meeting, no Center Street Station alternatives were proposed.
- On July 9, 1993, BART and SamTrans staff began an extensive screening process to reduce the number of proposed alternatives to a reasonable range of feasible alternatives to be recommended to the project Steering Committee.
- On July 15, 1993, BART and SamTrans staff met with Federal Transit Administration staff to discuss the DEIR/SDEIS. FTA staff suggested exploration of an alternative to relocate the intermodal station to the site west of Highway 101, in order to move the station site away from wetlands and endangered species habitat. In response to this, BART staff prepared preliminary drawings of an intermodal station site at Center Street in Millbrae.
- On July 30, 1993, BART management staff met with Millbrae and San Bruno city staff to initiate discussions regarding a possible Millbrae Center Street site for analysis.
- On August 13, 1993, the BART General Manager and management staff met with the Millbrae Mayor, City Administrator, and Planning Director to discuss inclusion of a Millbrae Center Street Station site proposal in their recommendation to the Steering Committee. No commitments were made by Millbrae city officials.
- On August 20, 1993, BART and SamTrans hosted Advisory and Steering Committee public meetings. The Steering Committee approved staff's recommendation to carry forward six alternatives for further study, two of which include a Millbrae Intermodal BART/CalTrain/ALRS Station at Center Street.

An accurate analysis of the social impacts of the Millbrae Intermodal Station at Center Street is contained in the DEIR/SDEIS and the DEIR/Technical Appendix. Please refer to Chapter 3 (Environmental Analysis), Chapter 4 (Other CEQA/NEPA Topics), Chapter 5 (Section 4(f) Evaluation), and Chapter 7 (Environmental Justice) in the documents and a summary listing of impacts and mitigations in the DEIR/SDEIS Executive Summary for additional information.

In addition, the commentor is referred to Response 54.1 for additional discussion of the scoping and screening process.

74.16. ...Social Impacts of Alternative IV and V at Millbrae Center St. Station have been almost completely left out...

**Response.** Please refer to Response 74.13 regarding the social impacts of the Millbrae Intermodal Station.

74.17. Transportation [Refers to Table S-5, page S-21 of the Executive Summary:] --2nd dot—add: and to neighborhoods by Millbrae Intermodal Station under Alternatives IV and V.

**Response.** Table S-5 in the Executive Summary refers to generalized construction impacts of the BART build alternatives. Neighborhoods in Millbrae would not be significantly affected by traffic-related impacts during construction. Construction vehicles would utilize surface streets, adding to local traffic in the vicinity of the Millbrae Intermodal Station under Alternatives IV and V. However, this impact is not significant and would be lessened by operating construction-related vehicles in the BART right-of-way and coordinating routes with local authorities. Please refer to

Impact 16 under Alternative IV on page 3.13-41 of the DEIR/Technical Appendix and to Impact 14 under Alternative V on page 3.13-45 of the DEIR/Technical Appendix.

- 74.18. Visual Quality [Refers to Table S-5, page S-21 of the Executive Summary:] --2nd dot--add: in airport west of Bayshore Lands along San Felipe and So. Lomita Canal.

**Response.** Table S-5 characterizes generalized construction impacts of the BART build alternatives. The commentor's edits are too specific for inclusion in this table, which is intended to provide an overview of construction effects expected under all BART build alternatives. A detailed analysis of the stated impact, i.e., loss of mature trees, is contained in the DEIR/Technical Appendix in Section 3.3, Visual Quality, under the analyses for the proposed project and Alternative III.

- 74.19. [Refers to Table S-5, page S-21 of the Executive Summary:] ---4th dot--add: Between Center Street and Monterey and Madrone streets in Millbrae.

**Response.** Please refer to Response 74.18. An analysis of the stated impact, i.e., visual alteration of the open space area between Highway 101 and the SPTCo/CalTrain mainline, opposite the SFIA terminals, is contained in the DEIR/Technical Appendix in Section 3.3, Visual Quality, under the analyses for Alternatives IV and V.

- 74.20. Hydrology [Refers to Table S-5, page S-21 of the Executive Summary:] --2nd dot--add: could cause flooding of homes.

**Response.** Table S-5 is revised to add the commentor's suggestion to the end of the second bullet under Hydrology on page S-21:

- Interference with drainage patterns. BART is required to build a facility in which storm water discharges do not exceed existing rates.

- 74.21. Transportation [Refers to Table S-6, Page S-22 and S-23 of the Executive Summary:]:--2nd dot--add: and between Burlingame and Millbrae.

**Response.** The commentor requests that the segment of Highway 101 between Burlingame and Millbrae be identified in Table S-6 in the second bullet under the heading "Transportation" as experiencing significant cumulative impacts. This segment is already acknowledged by the immediately preceding bullet, which notes significant cumulative impacts for the stretch between Millbrae and Third Avenues (i.e., from Millbrae south to San Mateo, including Burlingame).

- 74.22. [Refers to Table S-6, Pages S-22 and S-23 of the Executive Summary:]:---3rd dot--add: Millbrae Avenue and Rollins Road, Trousdale and El Camino, Millbrae Avenue and El Camino, Hillcrest and El Camino, Center Street and El Camino (under Alternatives IV, V and VI).

**Response.** The list of intersections presented in Table S-6 of the Executive Summary has been checked and properly includes only those intersections that satisfy the significance criteria described on page 3.1-99 of the DEIR/Technical Appendix.

- 74.23. [Refers to Table S-6, Pages S-22 and S-23 of the Executive Summary:]:---add 5th dot -- Very detrimental effect in Millbrae from greatly increased parking by BART station.

**Response.** The supply of parking in the BART garages at the Millbrae stations would be adequate, except at the Millbrae Intermodal Station under Alternative V. In all cases, mitigation measures are proposed to address the possibility of spillover parking into the surrounding community. Please refer to Mitigation Measure 2.1, Residential Permit Parking; Mitigation Measure 6.1, Parking Restrictions; and Mitigation Measure 6.2, Pricing Surcharge and Other Administrative Mechanisms, for the LPA on pages 3.1-167 and 3.1-169 in the DEIR/Technical Appendix. These same mitigation measures are referred to under the BART build alternatives with a station in Millbrae (Alternatives IV, V, and VI).

- 74.24. Land Use [Refers to Table S-6, Pages S-22 and S-23 of the Executive Summary:---add 4th dot---Detrimental effect on Millbrae housing and highways that are already heavily traveled.

**Response.** Table S-6 is a brief summary of cumulative impacts; please refer to the DEIR/Technical Appendix, pages 3.2-44, -50, -53, -69, -77, -83, -93 and -100 for more detail. The Executive Summary of the DEIR/Technical Appendix accurately reflects the anticipated cumulative land use effects. Cumulative traffic impacts to the highways are addressed on page S-22 under the heading "Transportation."

- 74.25. Visual Quality [Refers to Table S-6, Pages S-22 and S-23 of the Executive Summary:---1st dot---correct to read: Significant alteration of scenic views South of San Francisco and Millbrae...

**Response.** The edits suggested by the commentor relating to visual quality in Table S-6 of the Executive Summary are appropriate. The first bulleted item under Visual Quality in Table S-6, on page S-22 of the Executive Summary, is amended as follows:

- Significant alteration of scenic views in South San Francisco and Millbrae, most notably those of San Bruno Mountain.

- 74.26. Hydrology and Water Quality [Refers to Table S-6, Pages S-22 and S-23 of the Executive Summary:---1st dot---add: and along South Lomita Canal in Millbrae.

**Response.** Table S-6 is intended to generally identify *cumulative* impacts, which include those effects resulting from the BART extension plus other projects. No other projects have been identified in the vicinity that would contribute impacts to the South Lomita Canal and thus cumulate with those stemming from the BART extension.

- 74.27. Air Quality[Refers to Table S-6, Pages S-22 and S-23 of the Executive Summary:---1st dot ---add: except at or near BART stations and parking garages.

**Response.** The generalized cumulative effect described on page S-23 of the Executive Summary, Air Quality, first bullet refers to a reduction in *regional* vehicular emissions, where the "region" is the nine-county Bay Area. The anticipated slight increases in emissions near the proposed stations are described in Section 3.10 of the DEIR/Technical Appendix.

- 74.28. Construction [Refers to Table S-6, Pages S-22 and S-23 of the Executive Summary:-----2nd dot ---add: and Millbrae under Alternatives III, LPA, IV, V and VI.

**Response.** Table S-6 summarizes the cumulative effects of the BART build alternatives anticipated to occur during the construction period. When Millbrae staff were contacted to identify other major projects whose construction impacts might cumulate with those of BART, none were

- identified. Based on the city's input, Millbrae is not expected to experience cumulative construction impacts.
- 74.29. [Refers to Table S-6, Pages S-22 and S-23 of the Executive Summary:---3rd dot---(Cumulative Construction Effects)...and Millbrae...]
- Response.** Please refer to Response 74.28 for a discussion of Millbrae's omission of cumulative construction effects from Table S-6.
- 74.30. [Refers to Table S-6, Pages S-22 and S-23 of the Executive Summary:---5th dot (Cumulative Construction Effects)--add: and in Millbrae north of Madrone Street alongside the railroad tracks.]
- Response.** Please refer to Response 74.28 regarding the summary of cumulative construction effects in Millbrae.
- 74.31. [Refers to Table S-6, pages S-22 and S-23 of the Executive Summary:---7th dot---add: and Millbrae.]
- Response.** Please refer to Response 74.28 regarding Millbrae's omission from the summary of cumulative construction effects.
- 74.32. [Refers to Table S-6, pages S-22 and S-23 of the Executive Summary ---8th dot (Cumulative Construction Effects)---add: and Millbrae.]
- Response.** Please refer to Response 74.28 regarding Millbrae's omission from the summary of cumulative construction effects.
- 74.33. [Refers to Table S-6, Pages S-22 and S-23 of the Executive Summary:---ADD 12th dot (Cumulative Construction Effects)-- add: Detrimental effect of expanded Regional spending during construction periods.]
- Response.** Expanded regional spending is commonly considered a benefit to a community, not a negative impact. Infrastructure investment results in funds entering the local economy through paychecks and purchases of supplies, with secondary spending resulting from both. Please also refer to Response 74.28 for a discussion of Millbrae's omission from the summary of cumulative construction effects.
- 74.34. [Refers to Table S-6, Pages S-22 and S-23 of the Executive Summary:---ADD 13th dot(Cumulative Construction Effects)---add: Detrimental effects from destruction of homes and neighborhoods both during and after construction of Millbrae Intermodal BART Station (Alternative IV and V).]
- Response.** Please refer to Response 74.24 regarding impacts of the Millbrae Intermodal Station.
- 74.35. After reading these and many more statements in Document about things that can happen because of filled lands; changes to drainage causing floods; car wash can cause more Pollution in Bay; erosion of soils can be caused by culverts, it's proof that Rail tracks and train tracks can also be in jeopardy because of being built in flood plains when grounds get saturated. It is very unwise to build on such land also it is unwise to put a train car wash building above Canal Waters for draining into the Bay. These things affect Alternatives LPA, I-380, II, III, IV, V, and V-B. There

would be Unavoidable Significant Impacts in having BART train tracks go through that location north of Madrone St. whether to go to a Station, south of it, or to have tail tracks extend that far.

**Response.** The tailtracks, train car wash, and Airport Intermodal Station that are proposed to be constructed along the drainage canal north of Madrone Street under the above Alternatives are only partially located in the FEMA 100-year floodplain as shown in Figure 3.3-8 on page 3.8-5 of the DEIR/Technical Appendix. Those proposed facilities that border or exist within the 100- and 500-year floodplains would be constructed according to Mitigation Measure 1.1, Elevation of BART Facilities, on page 3.8-11 of the DEIR/Technical Appendix. The car wash will be located at the Daly City BART shop and yard under the Aerial Design Option LPA. To minimize the impacts regarding car-wash wastewater, BART train car wash facilities would be designed to contain and recycle wash water supplies. These wash waters would contain mild cleaning compounds that may be listed in CCR Title 22. Any use and/or discharge of hazardous compounds that may be used at this facility would be subject to RWQCB standards for discharge, and the requirements of an NPDES permit. Engineered fill and, if necessary, soil stabilization will be employed to minimize or accommodate the effects of saturation.

- 74.36. The description of [South Lomita Canal] 6' to 8' across width is wrong. Also it is much deeper than described and the pictures shown in the book are very misleading because tullies on each side of the cleared center show only 3 to 4 feet wide in the middle of the canal...

**Response.** The 48-inch box culvert and the 6-to 8-foot width of the waterway is not in reference to the South Lomita Canal, but rather to the San Felipe portion of this drainageway. To clarify, from about San Felipe Avenue south to about Santa Inez Avenue in San Bruno there is an earthen drainage, that for purposes of this report, is referred to as the San Felipe portion of the San Felipe-South Lomita Canal. A picture of this portion of the canal is presented in Figure 3.7-6, Photo 9 on page 3.7-26 of the DEIR/Technical Appendix. The southern end of this earthen drainage is connected to the much larger South Lomita Canal that runs further south to the Aviador pump station on the Millbrae Highline Canal. Pictures of South Lomita Canal are presented in Figure 3.7-6 of the DEIR/Technical Appendix.

- 74.37. San Felipe-South Lomita Canal moves a tremendous amount of water into the Bay during rainy season, even from easterly wet lands in San Francisco airport lands. In Alternatives IV and V, the new freeway ramps from Bayshore 101 would have to be bridge construction over the [San Felipe-South Lomita] canal - not filled land.

**Response.** Although there is no reference in the DEIR/SDEIR to "filled land" over San Felipe-South Lomita Canal, the Army Corps of Engineers terms structures over these jurisdictional waters as "fill." The mitigation measure addresses the placement of fill in wetlands, and the associated need for mitigation. However, bridging over the canal is not expected to result in any significant impacts and is not addressed by mitigation measures in this analysis.

- 74.38. There are no descriptions nor pictures in DEIR/SDEIR of South Lomita Canal as it turns corner and changes direction to South from the East running parallel to Highway 101 to Aviador Pump Station....

**Response.** No pictures or descriptions of this specific section of the South Lomita Canal were provided in the DEIR/Technical Appendix, though numerous pictures and descriptions of the canal are provided.

- 74.39. These pictures are submitted...in hopes you will better understand the serious flood problems that may be caused if these wetlands are disturbed by south Lomita Canal. They must not be dirt filled!

**Response.** The 1992 LPA calls for filling of two seasonal wetlands (0.59 acres) for construction of the proposed Airport Intermodal Station and tailtracks. Design Options V-A and V-B and Alternative VI avoid this impact. This comment was considered when BART selected Alternative VI Aerial Design Option as the LPA in late November 1995.

- 74.40. This picture shows water in culverts under R.R. Tracks coming from Lomita Creek side going to South Lomita Canal (a much wider drainage ditch than 5' to 8' wide) East Side of R.R. Tracks. This land would have to be filled and is habitat of 2 Endangered Species namely San Francisco Garter Snake and Redlegged Frog.

**Response.** The placement of fill in this particular wetland is addressed in Impact 7 for the 1992 LPA and its Least Cost Design option (page 3.7-38 on the DEIR/Technical Appendix); Impact 6 for Alternatives III and V (pages 3.7-50 and 3.7-61); and Impact 5 for Alternative IV (page 3.7-54).

- 74.41. These pictures were taken at the place BART DEIR states a box culvert can be built to contain the water! Also where land would have to be filled in order to build either BART tail tracks or BART tracks to Millbrae Intermodal Station (Alternatives IV and V). Close up picture of water coming from Lomita Creek into So. Lomita Canal from West site of bridge culvert. It is more like 15' to 20' wide than 6' to 8' as stated in DEIR and more than 6' deep (according to the men shown in upper picture who had just measured the depth.)

**Response.** Please refer to Response 74.36 for a discussion of the San Felipe-South Canal. The 6-8 foot width of the waterway refers to the dimension measured across the bottom of the culvert.

- 74.42. The rezoning and taking of R-2 homes where the people have demonstrated, they do not wish to have Marino Vista homes destroyed for another use of their land, by petition signed by 475 homeowners and residents telling of Cumulative Social and Environmental Impacts [of Alternative IV and V] should not be allowed.

**Response.** The commentator's opposition to Alternatives IV and V for the reasons cited is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).

- 74.43. Page 3.2-25 [of the DEIR/Technical Appendix]: Alternative IV Millbrae Intermodal Station cites that 41 percent are single family homes and that the remaining 59 percent are multi-family structures. This is not true. They are zoned Duplex (2-Family).

**Response.** In estimating displacement, the term "multi-family" was used to describe any building that has more than one unit. It is true that most of the houses in Marino Vista are either single-family or duplex homes.

- 74.44. Alternative V does not mention taking of the Millbrae homes mentioned in Alternative IV, but they are the same with a station in the same place with displacement of approximately 70 homes.

**Response.** The displacement of residences and businesses in Millbrae under Alternative V can be found on page 3.2-77 of the DEIR/Technical Appendix.

74.45. Visual Quality--- 1. the built environment, 2. significant vision and scenic San Bruno Mt., 3. sensitive receptors, and 4. streetscapes. Marino Vista and N. Millbrae are affected by all of these with Alternative IV and V. Unmitigable Significant Impacts.

**Response.** Alternatives IV and V will result in significant unavoidable impacts to the Marino Vista and North Millbrae neighborhoods. These impacts are summarized in Table 3.3-1 on page 3.3-92 of the DEIR/Technical Appendix, Comparison of Visual Impacts by Alternative, and are also addressed under discussions of Millbrae on pages 3.3-69 through 3.3-73 and 3.3-81 through 3.3-83. Streetscapes are not, however, impacted in these neighborhoods under Alternatives IV and V.

74.46. Sensitive Receptors - Airport Park homes west of railroad were left out. They are directly west of railroad tracks with small backyards abutting tracks (their bedrooms are at the back of their houses and their sleep will be disturbed.)

**Response.** The BART alignment under both Alternatives IV and V would travel at-grade approximately 100 feet behind the homes in the Airport Park neighborhood. Based on the 60-foot significance criterion for sensitive receptors, this would not be considered a visual encroachment. Noise and vibration impacts to these homes on the west side of the tracks would be significant and are addressed on pages 3.9-51 through 3.9-53 and 3.9-62 through 3.9-64 of the DEIR/Technical Appendix for Alternatives IV and V, respectively.

74.47. Streetscape - Page 3.3-16 [of the Summary DEIR/SDEIS]: Picture 25 - (happens to be on Cedar St., North side of street in Marino Vista and would be removed for the BART Garage. It is also smaller than the homes in North Millbrae so the photo does not show a typical Streetscape in North Millbrae.)

**Response.** Photo 25 in Figure 3.3-5 of the DEIR/SDEIS shows a home on the north side of Cedar Street in the Marino Vista neighborhood. Although this home would be displaced for the Millbrae Intermodal Station under Alternatives IV and V, the photo is generally representative of the streetscapes in the North Millbrae and Marino Vista neighborhoods. The size of the home is not the only defining feature of a streetscape. Streetscape refers to the width of the street, its landscaping, the height of facing buildings, building setbacks, and the continuity of structures fronting the street.

74.48. [A]lso page 3.3-13 [of the Summary DEIR/SDEIS] photo 17---. It's the largest home that would be left in Marino Vista and that would be facing the BART Garage, (middle of Cedar St.) on South side of street.

**Response.** Photo 17 in Figure 3.3-5 of the DEIR/SDEIS shows a residence that would face the BART parking structure associated with the Millbrae Intermodal Station under Alternatives IV and V. Under Alternatives IV and V, scale incompatibilities would result and are addressed on page 3.3-20; significant views would be diminished and are addressed on page 3.3-28; impacts to sensitive receptors adjacent to the BART station would be significant and are addressed on page 3.3-39.

74.49. -Table 3.3-1 - is incorrect - page 3.3-19 [of the Summary DEIR/SDEIS] - (Millbrae Marino Vista and N. Millbrae residents would all lose their drive-by scenic view to the North, completely, by Garage and Stations causing complete blockage of any view. You'd better believe we would all be Sensitive Receptors and suffer loss of Streetscape also.)

**Response.** It is unclear of the exact error to which the commentor is referring in Table 3.3-1. The table indicates that under Alternatives IV and V significant views would be impacted by the station, the Highway 101 ramps, and the ALRS. Sensitive receptors would be affected by the at-grade segment and the station, as shown on the table. The loss of streetscape is not considered a significant impact because Center Street was not identified as having a well-defined pedestrian-oriented streetscape.

- 74.50. Page 3.5-9 [of the Summary DEIR/SDEIS] -- Under Project Specific comments 2nd sentence not correct (in part) (Marino Vista and North Millbrae would not have improved emergency response time when calls to Fire Dept. go out. It would be the opposite. It would take longer to get to the homes because of BART Station and Garage and traffic congestion.

**Response.** Under existing conditions, emergency response vehicles must cross the CalTrain tracks at grade in order to respond to calls for service in the Marino Vista and North Millbrae neighborhoods. During CalTrain passbys, the intersection is blocked and emergency response vehicles are delayed. In the future, with increased CalTrain service, this situation will worsen. Alternatives IV and V of the BART extension would alleviate this problem by constructing a grade separation that would allow motor vehicles to pass under the BART and CalTrain tracks. This reconfiguration of the intersection would enable emergency vehicles to access the neighborhoods unimpeded by train service. It is true, as pointed out by the commentor, that this benefit would be somewhat offset by congestion at the station, but the congestion may affect response times only during the peak hours.

The traffic impact analysis performed for each BART alternative examined the level of congestion at key intersections in the project corridor. Four existing and/or future intersections along Center Street leading to the Marino Vista and North Millbrae neighborhoods were considered: Center Street's intersections with El Camino Real, San Anselmo, Monterey, and Bay. Only under Alternatives IV and V, both of which propose an intermodal station along Center Street, would any of these intersections be significantly affected. Of these intersections, only Center Street and San Anselmo would deteriorate to an unacceptable service level, suggesting substantial delays in trying to pass through the intersection. These delays could impede emergency response vehicles. However, with the proposed mitigation measures, the service levels improve from LOS E to LOS B. Consequently, emergency response vehicles are expected to access the Marino Vista and North Millbrae neighborhoods within acceptable response times.

- 74.51. Page 3.2-23 [of the Summary DEIR/SDEIS] -- Under Community Cohesion Social Considerations (not in Station Vicinity) left out Alternative V and left Millbrae out of Alternative IV, V and VI. Summary not correct.

**Response.** The Summary DEIR/SDEIS did not identify neighborhood impacts outside of the station areas in Alternative V or in Millbrae under Alternative IV or VI. This is because the BART alignment would pass along the existing railroad right-of-way.

- 74.52. Page 3.3-20 [of the Summary DEIR/SDEIS] -- under Millbrae 1st paragraph not correct: the 2nd from last sentence (The Freeway Ramp would touch down at Bay St. and Center St. intersection.)

**Response.** The Highway 101 ramp is adequately described in the Summary. Additionally, the DEIR/Technical Appendix describes the impact of the Highway 101 ramps more precisely on page 3.3-70 (Impact 16) under Alternative IV and on page 3.3-82 (Impact 18) under Alternative V. Under Impact 16, the location of the ramp is defined as follows: "The new northbound Highway 101 off-ramp would cross Highway 101 and descend to grade as it passes the north perimeter of the

Marino Vista neighborhood. East of Bay Street, as it crosses the highway, the off-ramp would be 25 feet high, and 15 feet high as it approaches the proposed BART parking garage."

- 74.53. Page 3.3-45 [of the Summary DEIR/SDEIS] -- ..."There would be no adverse streetscape effect in Millbrae under any of the BART build alternatives!" Definitely not a true Statement for an Assessment....Streetscape views would be very effected having to look at and travel through a Tunnel road through a BART Garage when we are used to looking at northerly open scenic space as we ride to town of Millbrae or walk.

**Response.** Based on the significance criteria for analysis of streetscapes, Center Street was not identified as having a well-defined streetscape. Altering a street that lacks human-scale features, street trees, and continuous facades would not have a significant adverse effect on the streetscape. However, significant views and scenic resources would be affected. The loss of views and scenic resources in Millbrae under Alternatives IV and V is discussed on page 3.3-28 of the Summary DEIR/SDEIS, and on pages 3.3-70 and 3.3-82 of the DEIR/Technical Appendix.

- 74.54. Page 3.3-50 [of the Summary DEIR/SDEIS] -- Top of page--1st paragraph- Alternatives L.P.A., III, I-380, IV, V, and VI will all cause bad visual effects, viewed simultaneously with either a BART Station and BART Garage or the BART tail tracks by all Millbrae residents who pass that way. Not true.

**Response.** Paragraph 1 on page 3.3-50 of the DEIR/SDEIS is part of a cumulative impact analysis. To determine cumulative impacts, the BART project is considered in conjunction with other past, present, or reasonably foreseeable future projects. A cumulative impact would occur if the visual effects of BART could be viewed simultaneously with other projects. Other projects include the SFIA expansion plans, the Hickey Boulevard extension, and the El Camino Corridor Redevelopment Project. Since these projects do not occur in Millbrae and thus could not be viewed simultaneously, no cumulative impact would occur. A BART station, BART tracks, and BART garage viewed simultaneously may result in a project-specific impact but would not result in a cumulative impact.

- 74.55. Page 3.10-4 [of the FTA document] -- Sensitive Receptors to ambient Air Quality. Millbrae is not properly listed there.

**Response.** The sensitive receptor locations on page 3.10-4 of the DEIR/SDEIS, are presented for illustrative purposes; the locations listed here are examples of sensitive receptor locations present in the project corridor and include project corridor "residential areas with children and/or elderly people." This is not a complete list of all sensitive receptor locations within the project corridor.

- 74.56. Page S-12 [of the Executive Summary]: Under Alternative VI last paragraph and continues to top of page S-15: Needs correction or explanation. A BART South San Francisco station is not listed and neither is a BART San Bruno station listed there. It only states there would be an Airport International Terminal Station and extended to a Millbrae Avenue BART/CalTrain station.

**Response.** Under Alternative VI there would be a South San Francisco Station at Hickey Boulevard and a San Bruno Station at Tanforan Shopping Center. The stations are shown under Alternative VI on Table S-3, page S-10, and on Figure S-2 on page S-11 of the Executive Summary.

74.57. Page S-16 [of the Executive Summary]: ...should be listed...as follows: ..."Intrusion of storage yard, tail tracks, car wash, and maintenance facility does not belong in Open Space zoned Wetland and Flood zoned lands."

**Response.** Please refer to Response 74.35.

74.58. [see above statement] also requires extensive fill of part of the South Lomita Canal habitat area, alongside railroad tracks easterly side from Northwest side of Madrone Street to the northern most point of the City of Millbrae boundary line. This should be determined it is not feasible....

**Response.** Construction of the BART track alignment in the area discussed in the comment will require extending the existing culvert to the east beneath the BART tracks, and may require the placement of fill material along this portion of the alignment as well. These impacts have been identified and discussed in the DEIR/SDEIS. For a more detailed discussion of this issue please refer to pages 3.7-38, 3.7-50, 3.7-54, and 3.7-61 of the DEIR/Technical Appendix.

74.59. ...Because to build either of those alternatives [Alternative IV and V], the BART tracks would still have to come through the same area and the extensive fill would still have to be done, thereby creating an unsafe, unstable saturated area underneath BART tracks, which would be very dangerous during wet, stormy weather or earthquakes and would cause flooding of houses in Millbrae Low Lands. These floodlands must not be disturbed. BART will engineer all fills and subgrades for proper support of its trains, all-weather, day and night.

**Response.** All significant environmental impacts regarding the construction of proposed Alternatives IV and V in flood-prone areas have been identified. The DEIR/Technical Appendix discusses possible flooding of adjacent areas related to Alternatives IV and V on pages 3.8-26 to 3.8-27 and 3.8-28 to 3.8-29. Implementation of the proposed mitigation measures discussed on these pages will reduce the impact to an insignificant level. BART will engineer all fills and subgrades for proper support of its trains.

## 75. BRUN, GOTTFRIED

75.1. I am very much in opposition to the BART San Francisco extension plan...[I]t does not make sense to build next to an existing system another system which is not only antiquated as well as debt-ridden, but also of astronomical cost.

**Response.** The commentor's general opposition to the project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (see Response 2.7 for a discussion of the LPA selection process). Please refer to Response 54.18 for a discussion on public support for extension of BART to SFIA.

75.2. The existing CalTrain system can very easily be upgraded to a light rail system, including an airport loop and a connection to the United Airline Maintenance Center.

**Response.** Please refer to Response 13.4 for a discussion of the CalBART proposal.

75.3. The CalTrain system has to be extended to Downtown S.F. and end there at a transfer station to the BART system.

**Response.** As noted in Response 2.7, extension of BART to the SFIA does not preclude further improvements to CalTrain.

- 75.4. BART should end at Colma, and save the government and especially the taxpayers of San Mateo Co. an astronomical amount of money.

**Response.** The commentor's opposition to extending BART south of Colma is noted. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (please refer to Response 2.7 for a discussion of the LPA selection process).

- 75.5. "Transferring" (as planned by BART) loses the efficiency of the whole system.

**Response.** The commentor is stating a preference to upgrade CalTrain with electrification, move the alignment to include stops at the SFIA and the United Airline Maintenance Center as well as extending it to downtown San Francisco. The transfers between BART and CalTrain, as stated in the DEIR/SDEIS, present transit riders with a new opportunity to be served by either transit system. BART riders would be linked to the destinations served by CalTrain and vice versa whereas without these transfers points, such opportunities would not exist.

- 75.6. The above-listed facts will definitely increase the revenues of CalTrain. Because of the efficient transportation, airport passengers and...business people will prefer this system over...freeway-traffic with all its impacts...

**Response.** Please refer to Response 11.6 for an analysis of the CalTrain downtown extension. BART has reviewed a similar proposal to that suggested by the commentor (i.e., TSM Alternative).

- 75.7. A simple rail system can be brought back quick into operation and be of great help when a disaster strikes in a seismic area like this.

**Response.** All BART facilities are designed to withstand earthquake loading with reserve capacity. BART design criteria require that all operating facilities be designed "with sufficient strength to undergo the effects of the Maximum Credible Earthquake without significant degradation of structural integrity and with any damage easily repairable. It is the goal of this policy to avoid the interruption of BART operations due to structural failure or damage."

## 76. BRUNZIE, SUZANNE

- 76.1. I am a concerned resident of Millbrae who welcomes BART, but urges the board to avoid using...Alternatives IV and V, V-A, V-B.

**Response.** The commentor's opposition to Alternatives IV and V, as well as to Design Options V-A, and V-B is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).

76.2. I favor Alternative VI if plans for continuing BART to the South Bay are pursued (so that Millbrae station is not "end of the line" for a prolonged period).

**Response.** Please refer to Response 2.7 for a discussion of the LPA selection process.

76.3. I oppose Alternative IV and V, V-A, V-B that would put a station in the middle of Millbrae, removing Millbrae Nursery School, encouraging residential street traffic through Millbrae.....I support Alternative VI.

**Response.** The commentor's support for Alternative VI is noted. Please refer to Response 2.7 for a discussion of the LPA selection process.

## 77. BUGLER, HELEN AND JOAN

77.1. ...I am opposed to the BART Alternative VI. The traffic parking, noise, and loss of affordable housing resulting from a Millbrae Station is unacceptable.

**Response.** The commentor's opposition to Alternative VI for the reasons cited is noted. BART is currently working with the City of Millbrae to develop a Millbrae Avenue Station design that avoids or minimizes many of the impacts (please refer to responses 10.18, 16.76, and 16.101 for a discussion of station design modifications proposed by the City of Millbrae). These impacts were considered by the BART and SamTrans boards during the LPA selection process; however, both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process). Please refer to Chapter 7 - Environmental Justice for discussion of loss of housing at Millbrae Station.

77.2. The existing locally preferred alternative with the airport intermodal station west of Highway 101 seems to be the most acceptable.

**Response.** The commentor's support for the proposed project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).

## 78. BULLIS, GREG H.

78.1. ...Any proposal that eliminates homes is unacceptable...losing [our home] to BART at "Fair Market Value" would financially destroy us.

**Response.** Please refer to Response 72.190 for a discussion of displacement and relocation assistance.

78.2. Millbrae Avenue cannot support the traffic that it carries today!

**Response.** The intersection of Millbrae Avenue and El Camino Real would experience a significant and unavoidable impact under Alternative VI. The intersection of Millbrae and Rollins Avenues would not have a significant impact under any of the BART build alternatives. Please refer to Response 6.6 for further discussion of traffic impacts and possible improvements to the intersection of El Camino Real and Millbrae Avenue. Please refer to Response 10.15 for a discussion of the intersection of Millbrae Avenue and Rollins Avenue.

78.3. Your EIR maps/proposal maps are inaccurate and confusing.

**Response.** The commentor does not specifically refer to any inaccuracies, so providing a specific response is not possible. However, most maps are based on original source materials drafted by the cities within the project corridor, and are accurate. More detailed maps in the documents were developed using modern photo geometric techniques.

78.4. Which homeowners are affected - List the addresses - Notify those homeowners and get your streets correct.

**Response.** Please refer to Response 47.12 regarding the listing of potentially affected properties.

78.5. I feel that BART has not fully looked at all possible alternatives to extension especially when it means the removal of any homes. The railroad right-of-way is more than wide enough to accommodate a second track.

**Response.** BART and SamTrans engaged in an elaborate screening of alternatives process, as described in Response 54.1, which evaluated all proposed alternatives from the DEIR/SDEIS scoping process. Section 2.5 of the DEIR/Technical Appendix summarizes the Alternatives Selection Process.

The goal of the screening process for the DEIR/SDEIS was to identify a reasonable range of alternatives that could feasibly attain the objectives of the project and, therefore, should be studied further in this environmental process. An alternative was found to be infeasible if it was not likely to be accomplished in a successful manner within a reasonable period of time, also taking into account economic, environmental, legal, social, and technological factors. The set of alternatives selected was structured to isolate the differences between options and to highlight the tradeoffs inherent in the selection of a preferred alternative.

Please refer to Response 54.17 for a discussion of the selection of the Colma to San Francisco Airport corridor as the corridor for study in the DEIR/SDEIS. The commentor is generally correct that the CalTrain and Southern Pacific San Bruno branch are wide enough to accommodate a second track without the need to acquire residences. The great majority of the potential residential acquisitions occur at proposed station sites.

78.6. As a new homeowner, I cannot afford to even think of reselling my house at this time. To do so would mean incurring a tremendous loss....

**Response.** Unless there has been a substantial reduction in property values since your home was purchased, the commentor should suffer no loss. BART/SamTrans will appraise each home at present fair market value and locate at least three comparable replacement dwellings. As an example, if your home appraises for \$100,000 and the comparable replacement dwelling units are priced at \$175,000 BART/SamTrans will be required to pay you \$100,000 for your home and if you accept the comparable dwelling unit for \$175,000 we will then buy down your mortgage equal to your \$100,000 value. Your mortgage payment would be the same.

78.7. Alternative VI is not a Locally Preferred Alternative for the Bayside Manor Area. An extension to ...[a] station on the south side of Millbrae Avenue in the Industrial Area could be much more feasible and less detrimental to property values although it would still have the same unacceptable traffic and noise problems.

**Response.** The commentor's opposition to the proposed location of the Millbrae Avenue Station is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).

- 78.8. It is my opinion...that BART should not extend beyond the Airport for any reason. How about placing the intermodal station at the Airport? You could bring CalTrain, BART, SamTrans and airport services all together at one place!

**Response.** Please refer to Response 79.6 for a discussion of why BART is extended past SFIA.

#### 79. BURKE PATRICIA

- 79.1. Without a vote of San Mateo County residents how can BART be legal. This is a form of taxation without representation.

**Response.** Please refer to page 1-8 of the DEIR/Technical Appendix for a discussion of measures voted on by San Mateo County residents.

- 79.2. The lack of regard for human health is obvious. The lack of equal treatment is obvious, (construction usually takes place in lower income and older housing areas). It touches the people with lowest political power. Human health is less important than the environment.

**Response.** Consistent with the President's Executive Order No. 12898, BART has identified and addressed possible disproportionately high and adverse human health or environmental effects of the extension on minority and low-income populations. See Chapter 7 of the DEIR/SDEIS. While it is true that the extension, if built, would have a disproportionate impact on low-income neighborhoods, the impact would be "disproportionate" only in comparison to neighborhoods in northern San Mateo County that are distantly removed from the path of the build alternatives. In this regard, BART's proposed alignment is substantially controlled by SPTCo's right-of-way. As explained in the DEIR/Technical Appendix, after an extensive public process, the build alternatives were determined to be the only feasible build alternatives that accomplish the project objectives. Please refer to the DEIR/Technical Appendix, pages 7-3 and 7-13, for a discussion of disproportionate impacts on minority and low-income residents. BART is committed to protection of both human health and the environment.

- 79.3. Why won't Senator Kopp speak to the people about his attitudes about BART?

**Response.** Senator Kopp is frequently quoted in the local press regarding BART.

- 79.4. Our concern is this: the health and well being of the people living and working along the corridor of construction will be sacrificed for the sake of expediting BART's construction goals...Being in the projected corridor of construction, we were researching the PM<sub>10</sub> factor, not only for the construction period but also for the lasting effects that construction will bring about.

**Response.** BART's construction goals respond to the public consensus for commuter line service. Construction-related emissions of carbon monoxide, ozone precursors, nitrogen dioxide, and sulfur oxides during construction activities will be minimized through the implementation of Mitigation Measures 1.1 through 1.5. These mitigation measures are described on pages 3.13-198 and 3.13-199 of the DEIR/Technical Appendix, and include configuration of construction parking

to minimize traffic interference, provision of temporary traffic control during construction activities, scheduling of construction activities during off-peak traffic periods, management of construction traffic, and maintenance of construction equipment engines.

While construction-period emissions of several pollutants will exceed the pertinent significance thresholds (as described in Section 3.13.13 of the DEIR/Technical Appendix), total regional emissions, when the project begins service, will be less than current emissions. Thus, the project will not have adverse long term health effects from air emissions.

Analyses of construction-related and operational particulate matter ( $PM_{10}$ ) impacts are presented in the DEIR/Technical Appendix, Sections 3.13.13 and 3.10, respectively.

$PM_{10}$  is of concern on both a local and a regional scale. On a local scale, inhalation of  $PM_{10}$  may cause adverse health effects including respiratory tract irritation. On a regional scale,  $PM_{10}$  reduces visibility through light scattering and also acts as a catalyst for the oxidation of sulfur dioxide to sulfate, a key step in the formation of acid rain.

There currently is no EPA-approved model for quantitative analysis of local  $PM_{10}$  impacts. For this reason, quantitative analysis of local  $PM_{10}$  impacts is not required as part of the air conformity assessment. Construction-related and operational  $PM_{10}$  impacts were evaluated solely on a total regional emissions basis.

Numerical significance thresholds for total regional  $PM_{10}$  emissions were developed from Bay Area Air Quality Management District (BAAQMD) guidance. The significance thresholds for construction-related and operational  $PM_{10}$  emissions are identical and are presented in Table 3.10-4 of the DEIR/Technical Appendix. The significance thresholds are not health-based levels, but instead represent emissions levels that may tend to worsen regional air quality. Exceedances of the significance thresholds would not necessarily result in localized airborne  $PM_{10}$  concentrations in excess of the state or federal ambient air quality standards.

As discussed in Section 3.13.13 of the DEIR/Technical Appendix, predicted construction-related  $PM_{10}$  emissions exceed the significance thresholds. Although mitigation measures would be implemented during construction to minimize  $PM_{10}$  emissions (please refer to Response 19.134), the emissions would still exceed the significance thresholds and therefore constitute an unavoidable significant impact. However, the predicted  $PM_{10}$  emissions would not necessarily result in airborne  $PM_{10}$  concentrations in excess of the state or federal ambient air quality standards.

As discussed in Section 3.10 of the DEIR/Technical Appendix, predicted operational  $PM_{10}$  emissions are less than predicted emissions levels under the No Build Alternative. This net decrease in regional  $PM_{10}$  emissions would produce a beneficial effect on regional air quality.

- 79.5. BART's 2,000-car garage in Colma is less than 2 miles north of Treasure Island Trailer Court and scheduled to become operational in June of this year. 325 residents living in Treasure Island Trailer Court will be subjected daily to the carbon monoxide from these cars...We are very concerned about another plan to build a second station, Hickey, immediately to the south of Treasure Island Trailer Court with the implication of introducing more cars into the area.

**Response.** Carbon monoxide (CO) is a "local" air pollutant; it is of concern only in the immediate vicinity of the emissions source or in an enclosed space. Even under the conservative

meteorological conditions assumed in the EIR analysis of local CO impacts, vehicular CO emissions would disperse to such an extent that no effect on ambient CO concentrations would be seen at a distance of 1,000 feet from the source. Under more realistic meteorological conditions, pollutant dispersion would occur to an even greater extent. The Treasure Island Trailer Court is approximately 8,000 feet from the existing Colma Station and is approximately 2,500 feet from the nearest proposed BART station (the Hickey Station). Therefore, vehicular CO emissions from BART parking facilities and nearby roadway intersections will have no impact on ambient CO concentrations at the Treasure Island Trailer Court.

The intersection of El Camino Real and Hickey Boulevard, which is adjacent to the Treasure Island Trailer Court, was included in the EIR analysis of local CO impacts. Predicted worst-case CO concentrations at this intersection (calculated at a distance of only 15 feet from the edge of the road) are less than the state and federal ambient CO standards under all BART alternatives. Please see Section 3.10 of the DEIR/Technical Appendix for further discussion of local CO impacts.

79.6. Why does BART run into the Airport and then back out again to Millbrae?

**Response.** The expansion of SFIA will generate an additional 65,000 to 70,000 cars per day. Effective transit alternatives are therefore imperative. Without a BART connection, the majority of these passengers, employees, and visitors would be forced onto congested Peninsula freeways for access to the Airport. Under Alternative VI, stations are provided at Hickey, Tanforan, the Airport International Terminal, and Millbrae Avenue. The BART extension to the Airport International Terminal provides direct service into the Airport with the highest number of passengers of any of the BART build alternatives. Alternative VI is one answer to avoiding impacts to wetlands and habitats west of U.S. 101 near the Airport.

The at-grade Millbrae Avenue Station would provide an intermodal connection among BART, CalTrain, and SamTrans buses. Providing a BART/CalTrain intermodal connection has been a cornerstone and integral part of all build alternatives evaluated in the Alternatives Analysis conducted by MTC and the DEIR/SDEIS led by BART and SamTrans. The ability to transfer between BART and CalTrain improves the regional transit system and provides additional mobility for transit dependents and transit access to the region for people of San Mateo County.

The Millbrae Avenue Station also provides approximately 3,000 parking spaces as both the local Millbrae and end-of-line station for commuters from the south. The Millbrae Avenue Station has excellent access from Highway 101 via the Millbrae Avenue interchange. For the above reasons, the Airport International and Millbrae Avenue Stations were both proposed in the Alternative VI Aerial Design Option.

79.7. Why didn't this study analyze ways of getting other forms of rail transit into the airport? Why just BART?

**Response.** The DEIR/SDEIS includes three alternatives that provide other forms of rail transit service into the Airport. Alternative II (TSM) includes a CalTrain/ALRS Station west of Highway 101, with the ALRS serving the Airport. Both the 1992 LPA (Proposed Project) and Alternative III (Base Case) include a BART/CalTrain/ALRS Station west of Highway 101, with the ALRS serving the Airport.

The BART station served by the ALRS has been determined an environmentally unacceptable solution. The Alternatives Selection Process is documented in Section 2.5, pages 2-99 through 2-112 of the DEIR/Technical Appendix. In addition, please refer to Response 54.17 for discussion of FTA's Major Capital Investment Planning Process.

79.8. Why aren't the ridership and cost figures for CalTrain and the various BART alternatives compared?

**Response.** Please refer to Response 14.92 for a discussion of the CalTrain extension to downtown San Francisco.

79.9. Why does the study assume that CalTrain stays at 4th and Townsend?

**Response.** Please refer to Response 11.6 for a discussion of transportation-related impacts to the BART extension with the CalTrain downtown extension.

79.10. Why doesn't the report have several funding scenarios? What will be the impact on SamTrans' ability to fund CalTrain and the bus system?

**Response.** Please refer to Response 14.93 for a discussion of the status of the financial plan at the time of publication of the DEIR/SDEIS. Please refer to Responses 10.1 and 14.92 for a discussion of SamTrans' participation in the project.

79.11. Why is the report biased toward Alternative VI and biased against CalTrain?

**Response.** Each feasible alternative, including Alternative VI, was analyzed at an equal level of detail. No recommendation regarding a preferred alternative is made. Please refer to Responses 9.1 and 11.6 for discussions of CalTrain and this DEIR/SDEIS.

79.12. Alternative VI displaces hundreds of people in Millbrae. Why doesn't Alternative VI just terminate at the airport?

**Response.** As shown in Table 3.2-3 of the DEIR/SDEIS, Alternative VI would displace 206 residential units and 519 residents. Most of these displaced residents would be in the Millbrae Gardens neighborhood. Chapter 7 (Environmental Justice) of the DEIR/SDEIS also discusses impacts to the Millbrae Gardens neighborhood.

Please refer to Response 79.6 for a discussion of the need for the Millbrae Avenue Station.

79.13. Why weren't Alternative[s] III, IV and V considered with only a small, non-auto, non-bus station at the south end of the airport property on the west side?

**Response.** Alternatives III, IV, and V were not considered with a non-auto, non-bus station at the south end of the Airport property west of Highway 101 because the MTC, BART-SFIA AA/DEIS/DEIR and DEIR/SDEIS patronage forecasts predicted substantial demand for both auto and bus access at all of the San Bruno stations evaluated. In order to maximize patronage and to provide an effective transit system, all San Bruno stations needed to provide both auto and bus access. If a San Bruno station did not provide access for autos and buses, it would not satisfy the project goal to "provide an effective addition to the regional transit system" that is convenient for passengers. The absence of auto and bus access would be an inconvenience for many passengers.

79.14. Why does the BART-SFO report assume that 19,000 CalTrain riders each day will transfer to BART at a station near SFIA?

**Response.** The transfer of riders between CalTrain and BART was forecast by MTC's regionally approved travel demand model. In this model, most CalTrain riders would have a faster trip to San Francisco on BART because the downtown BART stations are closer to more work destinations than the CalTrain terminus at Fourth and Townsend Streets. In addition, CalTrain requires a transfer to another transit system.

Please refer to Response 14.23 for further discussion of transfers between CalTrain and BART. Please note that the number of transfers includes riders going from BART to CalTrain as well as from CalTrain to BART.

79.15. Where is there a recent document from Washington that guarantees funding for this project?

**Response.** Funding for the proposed project is under consideration by the U.S. Congress at this time. A portion of required costs has been included in the President's proposed budget for FY 1998. Required capital funds will be allocated each year by the Congress. Please refer to Response 30.29 for a discussion of project funding.

79.16. Why spend a billion dollars on BART when it benefits only a few people on the Bayside communities of the Peninsula? What ever happened to cost-effective mass transit? Why not spend the "BART" money to upgrade CalTrain and benefit everyone between San Francisco and Gilroy?

**Response.** Federal funds expected to be dedicated to the BART extension are authorized from Federal New Starts Funds. These funds cannot be used for the CalTrain downtown extension as they can be committed only to New Rail Starts. Funding for the CalTrain downtown extension would come from the Fixed Guideway Source.

The Peninsula Joint Powers Board is pursuing environmental, engineering, and funding studies regarding the extension to downtown San Francisco in a process parallel to that of the BART extension. CalTrain provides a valuable service to central and southern San Mateo County, and parts of Santa Clara County, and should not be considered to be in a competitive situation with BART, which will provide faster service to more people in northern San Mateo County. CalTrain currently carries approximately 22,400 trips per weekday, approximately 13,200 trips of which are into or out of San Francisco. BART will carry approximately 90,000 trips per weekday in San Mateo County in the year of opening, because of direct access to the terminal area of SFIA, and job sites in San Francisco's Civic Center, Union Square, and greater downtown area for northbound employees. A CalTrain extension to downtown San Francisco would serve fewer riders at a higher cost, with fewer stations and track constructed (e.g., fewer jobs created and sustained). CalTrain service cannot be improved to the operational level of BART service in terms of speeds, frequency of trains, or reliability, although it provides an invaluable service to central and southern San Mateo County, and Santa Clara County.

Please also refer to Response 72.74 for a discussion of project benefits.

79.17. Why does the BART-SFO report compare travel time between downtown San Francisco and the Airport by starting at the BART Montgomery Street Station? Wouldn't the Transbay Transit Terminal be a more logical San Francisco starting point?

**Response.** The intersection of Second and Market Streets is the most popular commuter destination in downtown San Francisco. The Montgomery BART Station is directly beneath this location. The sample locations were selected to illustrate comparisons of travel time among the alternatives. Various other San Francisco locations besides 2nd and Market Street are also included

in the DEIR/SDEIS. Additional or other locations could have been selected to show the same or similar impacts, including the Transbay Terminal.

- 79.18. BART must not be allowed to extend past Colma until other transit alternatives have been thoroughly studied and compared with BART for cost and riders; and CalTrain must be upgraded to an electrified Rapid Transit System and a CalTrain connection into San Francisco International Airport should be studied.

**Response.** Since 1972, over 90 alternatives have been evaluated in the San Francisco-to-San Jose corridor. Section 2.5, of the DEIR/Technical Appendix, Alternatives Selection Process, summarizes alternatives considered and rejected since 1972. As discussed, all of the alternatives under study were determined, through an extensive public process, to be the only feasible build alternatives that accomplish project objectives. A summary of the history of alternatives considered in the San Francisco to San Jose corridor follows.

*San Francisco Airport Access Project, 1972. Sponsors: BART, City and County of San Francisco, and County of San Mateo.*

*Alternatives Studied:* Twenty different BART alignments were evaluated from Daly City to the vicinity of the Airport.

*Recommendation:* The Board of Control selected the MUNI (Southern Pacific San Bruno branch) corridor and a subway configuration to the center of the Airport garage as the basis for continued development of the extension.

*Peninsula Mass Transit Study, 1985. Sponsor: MTC*

*Alternatives Studied:* 1) CalTrain Tunnel to Transbay Terminal; 2) BART to San Jose; 3) LRT from San Francisco to San Jose; 4) Electrified or diesel CalTrain from San Jose with a tunnel to downtown San Francisco; 5) HOV lanes with express buses from San Francisco to San Jose; 6) BART to the Airport and LRT from the Airport to San Jose; and, 7) BART to the Airport and CalTrain Tunnel to Transbay Terminal.

*Recommendation:* MTC recommended that a Joint Powers Agency be formed to acquire the Southern Pacific rights-of-way from San Francisco to San Jose.

*BART San Francisco Airport Extension/CalTrain Upgrade Pre-Alternatives Analysis, 1990. Sponsors: MTC and FTA*

*Alternatives Studied:* 1) TSM; 2 & 3) BART to either an external or internal airport station; 4) Electrified CalTrain from downtown San Francisco (Second and Market) to San Jose with 156 trains per weekday; 5) BART extended to Airport External and electrified CalTrain from downtown San Francisco to San Jose with 156 trains per weekday; and, 6) CalTrain replaced by an LRT from San Francisco to San Jose.

*Recommendations:* 1 & 2) TSM and BART to Airport External were recommended for further study; 3) Initially MTC rejected BART to Airport Internal from further study for cost effectiveness, but, at the request of state and local officials, later added it to the AA/DEIS/DEIR; 4) Electrified CalTrain was not recommended for further study by MTC because it did not meet the FTA's cost-effectiveness criteria and funding for these improvements exceeded identified funding for rail extensions; 5) BART/CalTrain was not

recommended for further study because of the reasons stated in 4 above; 6) LRT between San Francisco and San Jose was not recommended for further study by MTC because of identifiable funding and lack of a transit or transportation agency sponsor.

*Alternatives Rejected During Alternatives Analysis Scoping, October 1990. Sponsor: MTC*

*Alternatives Screened:* 1) CalTrain Upgrade on the Peninsula Corridor, including more frequent service, electrification, and extension to Downtown San Francisco; 2) CalTrain Branch Line to Colma BART; 3) LRT from San Francisco to San Jose; 4) MUNI Metro extension to SFO via the Bayshore Corridor; 5) BART Tube Connection Between San Francisco and Oakland Airports; and, 6) Ten different BART alignments from Colma to the vicinity of the Airport.

*Recommendations:* 1) All of the above alternatives were screened and rejected from further study by MTC. However, the relocation of the downtown terminal in San Francisco was recommended for study as the TSM-B alternative.

*Alternatives Considered in the Alternatives Analysis/DEIS/DEIR, June 1992. Sponsor: MTC*

*Alternatives Studied:* 1) No-Build; 2A) TSM-A included CalTrain diesel service expanded to 86 trips per weekday; 2B) TSM-B included CalTrain diesel service expanded to 86 trains per weekday plus CalTrain extended to 2nd and Market Street; 3) BART to Airport External; 4A) BART Airport Internal; 4B) BART Aerial to an Airport Internal Station; 5A) BART to an Airport External Station with a subway spur to the Airport; 5B) Airport External via I-380; and, 6) Airport Internal via I-380.

*Recommendation:* At the conclusion of the Alternatives Analysis Study, BART, SamTrans, and MTC chose BART to Airport External via I-380 as the Locally Preferred Alternative.

*Alternatives Considered in the Alternatives Analysis/DEIS/DEIR, June 1992. Sponsor: MTC*

*Alternatives Screened and Rejected During Scoping:* 1) BART Single Track Loop to Airport Intermodal; 2) BART Double Track Spur to Airport Internal; 3) BART to Airport Internal via I-380; 4) Colma Creek Corridor with CalTrain relocation in South San Francisco; 5) LPA modification with CalTrain relocation in South San Francisco; 6) BART around the Bay and a new auto/BART bridge between SFIA and Oakland Airport; 7) BART Aerial to Airport Long Term Parking; 8) BART Hillside Boulevard Alignment; 9) LRT to I-380; 10) Transit Link System; 11) BART to Airport Internal with I-380 to S.R. 238 Bridge; 12) Tanforan Intermodal with Airport Internal Station; 13) Airport light rail loop to Terminal Concourses; and 14) Minimum Length Subway to Millbrae Intermodal with a subway design option to the GTC.

*Recommendation:* After screening, six alternatives and three design options, in addition to the LPA, were carried forward in the DEIR/SDEIS.

*CalTrain San Francisco Downtown Extension/System Upgrades Final Report, March 1994. Sponsors Joint Powers Board and MTC*

*Alternatives Studied:* 1) Muni Metro Extension to 4th and Townsend; 2) Subway/Service Extension to 2nd and Market; 3) Subway/Surface Extension to Bus Deck of Transbay Terminal; 4) Surface/Subway to Transbay Terminal (Loop Track Arrangement); 5) Surface/Subway to Relocated Transbay Terminal Between Main and Beale; 6) Surface

Alignment to 7th and Market Using Self-Propelled Electric Equipment; 7) Surface Alignment to 7th/Market and Beale/Market Using LRT Equipment; 8) Surface/Subway to Market and Beale; and, 9) Subway to 7th and Market.

**Recommendation:** In March 1994, the Joint Powers Board selected Alternative 8B-Surface/Subway to Market and Beale with electrification of CalTrain as the Locally Preferred Alternative. The Joint Powers Board has selected Kaiser Engineers to prepare an EIS/EIR to continue this work.

Kaiser Engineers subsequently concluded that this Alternative is technically infeasible.

Please refer to Response 13.4 for a discussion of the CalBART proposal.

#### 80. BURRIS, ELAINE R.

- 80.1. When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course, will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto to Hickey impossible.

**Response.** This comment references the potential traffic impacts to the T intersection of Camaritas and Hickey Boulevard if a BART station is constructed in South San Francisco. An analysis was conducted to separate the traffic impacts of the Hickey Station under Alternative VI compared to the impacts of the extension of Hickey Boulevard. In the A.M. peak hour in the year 2010, 60 additional vehicles are projected to travel eastbound on Hickey Boulevard between I-280 and El Camino Real due to implementation of Alternative VI, while 485 additional vehicles are projected to travel eastbound on this same segment due to the Hickey Boulevard extension. In the westbound direction of Hickey Boulevard along this roadway segment during the A.M. peak hour in the year 2010, the BART extension would reduce traffic by 110 vehicles while the Hickey Boulevard extension would add 259 vehicles. The additional traffic on Hickey Boulevard between I-280 and El Camino Real due to the proposed BART station in South San Francisco is minimal, especially when compared to the additional traffic caused by the extension of Hickey Boulevard between El Camino Real and Hillside Boulevard.

- 80.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** The all-way stop controls at the Hickey Station Exit/Hickey Extension intersection will be included under any of the BART build alternatives that include the Hickey Station.

- 80.3. I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will be have the least impact with respect to noise and vibration.

**Response.** The commentor's support for the proposed project (the 1992 LPA) because of its subway design is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. The selected LPA (the Alternative VI Aerial Design Option) incorporates a subway design along most of the proposed route, except in the vicinity of the SFIA parcel west of Highway 101 and around the Millbrae Avenue Station.

## 81. BURTZLOFF, LORRAINE

- 81.1. Alternative VI, of the many plans proposed, appears to be the most desirable and meet all the other main criteria.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).

## 82. BYWATER, D.F.

- 82.1. Alternative VI is definitely the best route.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).

## 83. CADONA, ANNA

- 83.1. All the proposals presented are not acceptable to the residents of San Bruno, Millbrae, and Burlingame. We do not want BART in our neighborhoods. The proposal is unacceptable foremost since Measure K allows BART to the airport only.

**Response.** The commentor's general opposition to the project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (please refer to Response 2.7 for a discussion of the LPA selection process).

## 84. CADONA, BRUNO

- 84.1. All the proposals presented are not acceptable...The proposal[s] [are] unacceptable foremost since Measure K allows BART to the airport only. The blatant attempt by BART officials to replace CalTrain with BART is offensive.

**Response.** Please refer to Response 2.7, 79.16 and 79.18 regarding BART and CalTrain.

- 84.2. BART in our neighborhoods is unnecessary as we have CalTrain...We do not want to pay for your BART. We do not want our neighborhoods to be segregated by your ugly and dangerous BART tracks and separation walls or elevated tracks. We do not want the noise, the parking lots, the traffic and the degradation of our neighborhoods [that] BART will cause.

**Response.** The commentor's general opposition to the project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (please refer to Response 2.7 for a discussion of the LPA selection process).

85. CAMERON, CHARLIE

- 85.1. BART should have gone into the Airport 30 years ago.

**Response.** Please refer to Response 79.18 for a discussion of public planning activity since 1972.

86. CAMILLERI, MARY

- 86.1. First of all I don't want to see BART in our City [San Bruno].

**Response.** The commentor's general opposition to extending BART through San Bruno is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (please refer to Response 2.7 for a discussion of the LPA selection process).

- 86.2. The[re] will be more crime [and] vandalism...You will need to hire more police officers.

**Response.** The DEIR/SDEIS in Section 3.5, Community Services and Facilities, explains that additional BART police will be hired in order to improve response times. Please refer to Response 16.106 for additional measures to be incorporated into the design of the station and parking facilities, and to Responses 14.57 and 16.2 for additional information regarding this matter.

- 86.3. If BART comes though keep it on East side away from all cities, San Bruno residents want our city the way it is [and] we don't want any BART stopping in our town. I hope someone will reconsider this BART through any city.

**Response.** The proposed BART San Bruno branch alignment, common to all BART build alternatives, is the best approximation of a north/south transportation corridor through San Bruno and South San Francisco. However, it should not be implied that it would be equally feasible to run the alignment through either of these cities' transportation corridors. In fact, each of the proposed build alternatives generally follows the existing path of the SPTCo San Bruno branch and the SPTCo/CalTrain mainline from the Colma Station to the vicinity of the SFIA. As discussed in Chapter 2 of the DEIR/Technical Appendix, these build alternatives were determined, through an extensive public process, to be the only feasible build alternatives that accomplished project objectives.

Please refer to Response 54.17 for a additional discussion of selection of the SPTCo San Bruno branch as the preferred corridor for the BART-San Francisco Airport Extension.

87. CAMPBELL, DANIEL

- 87.1. When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course, will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto to Hickey impossible.

**Response.** Please refer to Response 80.1 for a discussion of left turns onto Hickey Boulevard.

87.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure on the Hickey Boulevard extension.

87.3. ...I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will be have the least impact with respect to noise and vibration.

**Response.** Please refer to Responses 2.7 and 80.3 for a discussion of the LPA selection process.

#### 88. CANO, ANNE

88.1. Do not put a station at Chestnut! The traffic is already bad and having a station at Chestnut will be a disaster. I don't want any more noise, traffic or ugly buildings in my neighborhood.

**Response.** The Chestnut BART Station is included only in Alternative III. Based on the environmental information in the DEIR/SDEIS and on a preliminary evaluation of comments received, the BART and SamTrans boards selected Alternative VI as the new LPA on April 27 and 28, 1995 for advancement to further preliminary engineering and environmental evaluation. In November 1995, the boards voted to modify the LPA to reflect the Alternative VI Aerial Design Option. The new LPA does not include a station at Chestnut Avenue. Please refer to Response 2.7 for additional discussion of this LPA selection process.

88.2. I see no reason for BART to come any further down the peninsula. Super Shuttle does a great job of getting people to and from to the airport without using taxpayers money. Maybe shuttles from Daly City/Colma BART and CalTrain are a better alternative!

**Response.** The commentor's opposition to extending BART is noted. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (please refer to Response 2.7 for a discussion of the LPA selection process).

#### 89. CASSANEGO, GILDA

89.1. I want to know what date (month) that the final decision will be made.

**Response.** A final decision regarding project implementation will be made as part of the Record of Discussion (ROD) scheduled for adoption in spring or summer of 1996.

89.2. I also need to know the leeway time between the decision and moving time.

**Response.** Relocation laws and regulations have many requirements built into them to ensure that anyone displaced will have ample time to locate new housing and prepare for their move. The displacing agency must give information, several notices, and provide at least three possible housing units that are available and meet the relocatee's needs before a relocatee is required to move.

**90. CASTRO, VIRGILIO**

- 90.1. We are eager that BART will pass, in Huntington Avenue in the Old railway, without homes being demolished. [I suggest] BART passing under freeway bridge down to San Bruno and Millbrae.

**Response.** In order to preserve the 5th Avenue neighborhood with the least number of impacts, Huntington Avenue will be placed east of the BART tracks. BART passenger activity will largely be confined to the shopping center area only. The LPA alignment passes under the freeway bridge as noted.

**91. CHAMBERS, TOM**

- 91.1. I strongly support the "Locally Preferred Alternative" which links BART, CalTrain, and SFO at a common station.

**Response.** The commentor's support for the proposed project (the 1992 LPA) due to the joint BART/CalTrain station is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Although the boards selected Alternative VI Aerial Design Option as the LPA, the new LPA features a joint BART/CalTrain station at Millbrae Avenue and a BART station at SFIA.

- 91.2. The LPA has the following advantages...An excellent link to all airport terminals via the airport ALRS for both BART and CalTrain. This should increase CalTrain ridership, something inadequately addressed in the DEIR.

**Response.** Changes in CalTrain ridership are addressed in the DEIR/Technical Appendix as evidenced by Tables 3.1-5, Regional Daily Transit Operator Boardings, 3.1-7, Daily Intermodal Transfers Between Rail Services, 3.1-8, Daily Trips by Mode to SFIA, and 3.1-15, Proposed Project Daily Trips by Mode to the San Francisco International Airport. Please also refer to Response 11.6 for a discussion of CalTrain ridership.

**92. CHAVÉZ, JOSÉ**

- 92.1. I believe that the construction and or operation of the BART line through South San Francisco will adversely affect the quality of life or property of residents of South San Francisco....I urge BART to cancel their plans of constructing a BART station through South San Francisco because the residents of South San Francisco do not want a BART station in or through their city.

**Response.** The commentor's opposition to Alternatives IV and V for the reasons cited is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).

**93. CHEN, TONY**

- 93.1. ..believe that if BART is connected directly to SFO, more people like myself would be inclined to use BART to get to the airport....A direct access to the airport would eliminate the need to get off BART at Millbrae, then take a shuttle and transfer to the airport.

**Response.** The commentor's support for a BART extension to the SFIA is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (please refer to Response 2.7 for a discussion of the LPA selection process). The LPA includes a direct BART line to the Airport.

94. CHOW, ARTHUR M.

- 94.1. This concerns the new Hickey Station. The relocation of above ground high power lines and towers closer to Camino Court development creates an increased health risk associated to long term exposure to EMF. A better solution is to relocate these high power lines underground either under the new road or under the station and parking structure.

**Response.** Prior to the proposed relocation of the existing above-ground power lines near Hickey Station, PG&E would perform a Relocation Feasibility Study to evaluate relocation alternatives. The criteria for selecting the final power line configuration would include the potential health risk of long-term EMF to nearby residents.

95. CID, LIZA

- 95.1. I do not agree with the BART station on Mission Road. This is not a large street and with the creation of this station would create much more traffic and commotion.

**Response.** The location of a BART station on Mission Road is consistent with the City of South San Francisco Redevelopment Plan for the El Camino Corridor Area Project (June 9, 1993). Traffic and parking mitigation measures are discussed on page 3.1-125, paragraphs 5.1 and 5.2, page 3.1-167, paragraph 2.1, and page 3.1-169, paragraphs 6.1 and 6.2 of the DEIR/Technical Appendix. In addition to these mitigations, a key planned transportation improvement that is not part of the BART extension is the extension of Hickey Boulevard by San Mateo County, connecting Mission Road with Hillside Boulevard.

96. CLARK, RICHARD G.

- 96.1. I am writing in support of the proposed BART Extension to San Francisco International Airport....Access to the airport from my home and office in San Francisco via safe, rapid, frequent public transit would be beneficial for me and other travelers...Congestion relief and air quality improvement would result from passenger and employee access to the airport...

**Response.** The commentor's support for the LPA is noted. Please refer to Response 2.7 for a discussion of the LPA selection process.

97. CODE THREE LOCK AND GUN

- 97.1. ...All of the proposed alternatives to date will cause major disruption to my business, and to the downtown area. In my experience, this disruption can only be bad, never good....I believe that there is only one option to support: a bored tunnel through the downtown district. I do not support any cut-and-cover or any equivalent of a cut-and-cover construction proposal.

**Response.** The commentor's general opposition to the project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design

Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process). A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

#### 98. COLARUSSO, AL.

- 98.1. In order to build the Hickey Blvd. SSF Station, BART should be initiating process with Caltrans for public street connection with State Route 82 (El Camino) and with SSF for "new" streets.

**Response.** BART has already made initial contact with Caltrans and other agencies regarding street improvements. Further coordination regarding specific street connections will be addressed during preliminary engineering.

- 98.2. I like the idea of LPA!

**Response.** The commentor appears to support the proposed project. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).

#### 99. COLMA RESIDENTS (11 PEOPLE)

- 99.1. SamTrans has been the most convenient and reasonable means of transportation for us....Now BART wants to come up with the needed money by penalizing SamTrans riders. It is unfair....BART is not going to get our business....

**Response.** The commentor's general opposition to the project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process). It is hoped that the commentor will use BART and SamTrans in the future.

#### 100. CONCERNED NEIGHBORS IN WINSTON MANOR

- 100.1. When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course, will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto to Hickey impossible.

**Response.** Please refer to Response 80.1 for a discussion of left turns onto Hickey Boulevard.

- 100.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure on the Hickey Boulevard extension.

- 100.3. I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will have the least impact with respect to noise and vibration.

**Response.** The commentor's support for the proposed project (the 1992 LPA) due to the subway design is noted. Please refer to Responses 2.7 and 80.3 for a discussion of the LPA selection process.

## 101. COOK, THERESA

- 101.1. BART must give the people of the Peninsula a full report on the I-280 corridor as a promise to go from San Francisco to San Jose to circle the bay.

**Response.** According to BART Extension Policy, the extension of BART around the Bay through Santa Clara County and back north to connect to the proposed BART extension is beyond the scope of the current District Phase II and III Extensions. The BART Extension Policy supports extensions inside the District and outside the District in San Mateo and Santa Clara counties. The non-District extensions are "Subject to a satisfactory cost-sharing arrangement and parallel construction within the District." Any extension would require full environmental disclosure and preparation of Environmental Impact Statement(s) and Report(s), as required under NEPA and CEQA environmental laws.

I-280 is not proposed as the preferred corridor for any BART extension study further south on the Peninsula. For example, the 1976 San Mateo County Development Project, which evaluated a BART extension south of the Airport area to the San Mateo/Santa Clara county line, evaluated the Southern Pacific/CalTrain corridor. Please refer to Response 101.3 for additional information regarding use of the I-280 corridor for a BART extension.

- 101.2. It is my understanding that BART needs the commitment of the Peninsula to pay for the finishing of the East Bay projects - Is this the truth?

**Response.** Please refer to Response 54.16 for a discussion of the SamTrans role in East Bay BART extensions.

- 101.3. My view has always been BART by the I-280 corridor which indeed was a consideration in the 1974 plans, because BART was committed to go around the Bay. I have never really received a valid explanation of why this is no longer an alternative to explore.

**Response.** In 1972, the San Francisco-Airport Access Project (SFAAP) evaluated three corridors from Daly City to the SFIA, including the I-280 to I-380 corridor, for a possible extension of BART. During the study, the SFAAP Board of Control selected the Muni corridor adjacent to the SPTCo San Bruno branch for continued study and rejected the Colma Creek and I-280 to I-380 corridors from further study. The I-280 to I-380 corridor was rejected because of engineering difficulties, site access problems, possible highway relocations, and because the aesthetic impact of various transit structures on the existing freeway was deemed undesirable. The corridor considered for the BART extension has long focused on the Muni/Southern Pacific San Bruno branch. Since 1972, the Muni/Southern Pacific/CalTrain corridor has been the proposed corridor for the BART extension to the Airport.

The I-280 corridor is not proposed for any BART extension study through the Peninsula. The 1976 San Mateo County Development Project, which evaluated a BART extension south of the Airport area to the San Mateo/Santa Clara county line, evaluated the Southern Pacific/CalTrain corridor. BART's preferred maximum gradient is 3 percent and the absolute maximum gradient is 3.5 percent +/- . The I-280 highway alignment south has many gradients greater than 3.5 percent. A BART alignment in the I-280 corridor would necessitate aerial structures across the valleys and

- tunneling through the peaks of the I-280 alignment. I-280 was neither designed nor constructed with a median wide enough for a BART transit line.
- 101.4. Since I-280 is not being considered the following options are in my opinion listed in their importance. 1. No Build 2. T.S.M. 3. No BART to S.F.O. 4. Alternative VI with a station at Tanforan, Tunnel from Tanforan to S.F.O. and Tunnel to Millbrae intermodal station.
- Response.** The commentor's preference for the stated alternatives is noted. Section 1.3 of the DEIR/Technical Appendix provides justification for the need of the proposed project. Background studies demonstrating the need for a rail project south of Colma are described in Response 79-18. In November 1995, the BART and SamTrans boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).
- 101.5. If San Bruno has a station then Millbrae (2 miles away) should have the intermodal station. No! Intermodal station at Lomita Park, the topography could not tolerate the impact, snakes and dead end streets, etc.
- Response.** The proposed project, the I-380 Least-Cost Design Option, and Alternative III include a BART/CalTrain/Airport Light Rail intermodal station west of Highway 101. After mitigation, there would be no significant impacts on the local Lomita Park streets due to the station west of Highway 101. However, there would be a significant unavoidable impact on the San Francisco garter snake, an endangered species. Please refer to Section 3.1, Transportation, and Section 3.7, Biological Resources, of the DEIR/Technical Appendix for an evaluation of traffic and biological impacts and proposed mitigation measures.
- 101.6. May, I also ask how BART has come up with the term "Locally Preferred Alternative," which is a misnomer.
- Response.** "Locally Preferred Alternative" (LPA) is a term from the FTA's Procedures and Technical Methods for Transit Project Planning, 1986. It refers to the alternative that is preferred by the local populace, and is thus the alternative for which local sponsors conduct further engineering studies and final environmental documentation. In the spring of 1992, the BART and SamTrans boards of directors and the MTC selected the AA/DEIS/DEIR Alternative 5A - BART to Airport External via I-380 as the LPA.
- Based on the environmental information in the DEIR/SDEIS, and in a preliminary evaluation of comments received in April 1995, the BART and SamTrans boards of directors selected Alternative VI as the new LPA for advancement to further preliminary engineering and environmental evaluation. In November 1995, the boards modified the LPA to reflect the Aerial Design Option.
- 101.7. Quoted as parking spaces at the Airport intermodal (Lomita Park) 2,325 Impossible, this is Federal protected land.
- Response.** The proposed project includes a BART/CalTrain/Airport Light Rail intermodal station west of Highway 101 and 2,325 parking spaces in structure and at-grade. The Airport property west of Highway 101 is not "Federal protected land" as the commentor states, but it has wetlands and is habitat of the San Francisco garter snake, an endangered species. Construction of any alternative on the sensitive species habitat west of Highway 101 requires approvals by the U.S. Fish and Wildlife Service, the California Department of Fish and Game (CDFG), and the U.S. Environmental Protection Agency because of potential impacts to endangered species. Environmental resource agencies have noted disapproval of the proposed project and other

alternatives with an intermodal station west of Highway 101, due to potentially significant impacts on prime habitat for the San Francisco garter snake. In addition, the commentor is referred to Response 101.5 for additional discussion of the external airport station.

- 101.8. (#82"BART['s] first commitment was to circle the Bay. Then this detour to San Francisco [Airport] was introduced....We don't need BART to go to SFO....

**Response.** BART's first commitment is not to circle the Bay; rather the BART Board of Directors has adopted a BART Extension Staging Policy, revised October 25, 1990, that lays out the priorities for BART extensions. The BART-San Francisco Airport Extension is a Phase I Inside Current District Extension, pursuant to the BART/SamTrans Agreement, March 1990. Circling the Bay are lower priority extension projects identified in Phase II and III outside the current District of the Extension Staging Policy.

- 101.9. I-280 is closer and would not devastate communities. Also, BART would be able to travel faster with fewer stops....Wonder why BART has not submitted the plan I saw as one of the alternatives issued in 1974?

**Response.** Please refer to Response 101.3 for a discussion of the I-280 corridor and a summary of various extensions in Response 79.18.

## 102. CYPRESS LAWN CEMETERY

- 102.1. Cypress Lawn holds an exclusive easement over this property for purposes related to cemetery operations by virtue of a prior grant. Thus, we fail to understand why the EIR continuously refers to an alignment which follows the SPTCo right-of-way through the cemeteries. See, for example, pages 2-10, 2-33, 3.2-9, 3.2-56, 3.2-65, 3.2-67, 3.2-74, 3.2-81 [of the DEIR/Technical Appendix]. The EIR should be revised to indicate the correct ownership.

**Response.** Cypress Lawn has an exclusive easement from SPTCo, BART maps will be revised to identify it.

- 102.2. ...Health & Safety Code Section 8560...provides that no railroad or public thoroughfare shall be laid out across any property dedicated for cemetery purposes without the consent of the cemetery authority owning and operating it, or of not less than two-thirds of the owners of the interment plot. As we have indicated, our client is generally supportive of the BART extension along former SP right-of-way, provided that: 1) the extension through the Colma cemeteries is a fully covered, below grade underground configuration; 2) all construction and operational impacts of Cypress Lawn Cemetery are fully mitigated; and 3) Cypress Lawn Cemetery is compensated for economic loss caused by the construction and operation of the extension.

**Response.** The commentor's general support for the BART extension along the Southern Pacific San Bruno branch right-of-way with the above provisions is noted. All other BART build alternatives, except for Alternative III, are in a subway configuration through Cypress Lawn Cemetery. Alternative III is in a below-grade open retained cut through Cypress Lawn Cemetery. BART/SamTrans would address demonstrable loss of income to cemetery in accordance with state and federal relocation laws.

- 102.3. ...We would appreciate it if you would provide us with detailed information on the actual mitigation proposed for impacts related to the Cypress Lawn granite archway constructed in 1892,

the Cypress Lawn groundwater well, long-term landscaping replacement, and noise, so that we can determine if these impacts, which are identified as mitigable, truly can be mitigated.

**Response.** BART plans to avoid any construction or other impacts to the historic 1892 historic granite archway. Cypress Lawn Cemetery will participate in the development of and be a signatory to the Memorandum of Agreement (MOA) to address any potential construction effects to Cypress Lawn Cemetery property. This would include long-term landscape replacement, protection of resources and other terms of construction. BART staff have been coordinating with the Cemetery prior to certification of the project. At that time BART can enter into formal agreements.

Under current plans, the well at Cypress Lawn would be replaced by a new well located on the property that would tap the same aquifer as the existing well. New piping to connect to the new well into the existing water distribution system would also be required. Alternative III would generate airborne noise impacts at the Cypress Lawn cemetery, and a sound wall at the retained cut structure would be installed (please refer to the DEIR/Technical Appendix page 3.9-36). This wall would be nominally three to four feet in height. Final wall heights, typically about 6 feet high, would be determined in preliminary design.

- 102.4. xuxWe also believe that the EIR needs to provide detailed information on impacts and proposed mitigation related to disruption of utilities and irrigation lines which cross the former SP right-of-way.

**Response.** All significant environmental impacts concerning utility and irrigation lines which cross the former SPTCo right-of-way are identified in the DEIR/Technical Appendix and appropriate mitigation measures are proposed. During the final engineering design, the precise location of existing utilities, including gravity storm and sanitary sewers, will be verified.

As discussed in the DEIR/Technical Appendix on pages 3.13-101 to 3.13-106, existing utilities will be supported in place during construction of the cut-and-cover box, whenever practical. If an exiting utility cannot be supported in place, it will either be reconstructed in the same location using materials and methods that will result in a utility that can be maintained in place or it will be relocated. All details of these efforts will be agreed upon to the mutual satisfaction of BART and the utility owner.

Disruptions to existing utility service will be infrequent and will be minimized by careful design and construction planning. Some utility owners (storm drain, sanitary sewer, water) may opt to have the BART contractor design and construct the modifications or alterations to their systems. Other owners (power, telephone) will opt to design and construct their own work. Costs for all work involving existing utilities will be negotiated between BART and the utility owners.

- 102.5. ...Cypress Lawn requests that it be involved in all discussions with either the State Historic Preservation Officer or the Advisory Council on Historic Preservation relating to: 1) any National Historic Preservation Act ("NHPA") eligibility determinations affecting Cypress Lawn; and 2) the effect of the BART project on Cypress Lawn pursuant to NHPA.

**Response.** SHPO concurred with the eligibility determination that Cypress Lawn was a historic cemetery district. After consultation with the SHPO, BART determined that the project did not have an effect on the Cypress Lawn Gate, under the Section 106 criteria. BART will be making agreements with Cypress and other cemeteries to ensure that restorative and protective actions to safeguard cemetery-designated resources are undertaken during project construction. Please also refer to Response 102.3 for additional discussion of impacts to historic resources.

### 103. DE ANDA, KATHARINE

- 103.1. "The Joint Board's Citizens Advisory Committee for CalTrain supports those BART alternatives which provide the best connectivity, by means of the fewest transfer points, to BART and the SFO Airport people mover, for CalTrain riders. Furthermore, the CalTrain Citizens Advisory Committee supports a people mover system at the airport which serves a wide range of worksites and not just the main terminal." I would also add that "transfer between CalTrain and BART or the people mover system should be located and timed so that they are as 'seamless' as possible."

**Response.** BART will work with the JPB to provide the most "seamless" transfer possible considering operational and station function requirements. Please refer to Responses 41.3 and 107.8 regarding the intermodal nature and intent of the BART alternatives, and to Response 666.111 regarding BART/CalTrain transfers.

### 104. DEL ROSARIO, ERNESTO

- 104.1. The airport is a 24 hour operation. Extending BART to the terminal, will this mean BART will operate 24 hours too so as to take advantage of having a station at the terminal?

**Response.** Although the San Francisco International Airport operates 24 hours, BART plans to maintain its current hours of operation. BART currently provides service between 4:00 A.M. and 12:00 midnight/1:00 A.M. on weekdays, 6:00 A.M. and 12:00 midnight/1:00 A.M. on Saturdays, and 8:00 A.M. and 12:00 midnight/1:00 A.M. on Sundays. Typically, the last train run starts at the end of each line at approximately 12:00 A.M. and terminates at the corresponding end of the line at approximately 1:00 A.M. BART utilizes the idle periods to conduct preventive maintenance.

### 105. DENTAL ASSOCIATES

- 105.1. We are totally and vehemently opposed to the Alternative III BART to Airport Intermodal (Base Case) proposal.

**Response.** The commentor's opposition to the Base Case Alternative (Alternative III) is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).

- 105.2. The proximity of the Chestnut Station location with Alternative III (Base Case) would effectively make the current use of these properties as Medical and Dental offices impossible to continue.

**Response.** The Chestnut Station is not expected to displace the use of this office. Other effects such as traffic, visual changes, and noise and vibration would not preclude continued use of the space for medical/dental offices. Please refer to responses 105.6 through 105.16 for additional discussion of potential impacts on the medical/dental offices.

105.3. With respect to Alternatives II, IV, V, V-A, V-B, VI which incorporate a Hickey Station instead of a Chestnut Station, we have the same concerns only to a somewhat lesser degree because we still have the proximity of the tracks severely impacting our properties and those that work there.

**Response.** BART would be in a cut-and-cover (underground) alignment here, and thus would not permanently impact nearby uses.

105.4. Why do we find on the LPA Alternative plan that the Southern Pacific Right-of-Way is narrower than it is on Alternative III (Base Case) in the area of our properties at 1131 and 1135 Mission Road?

**Response.** The right-of-way is the same in both cases. A drafting error occurred on the Alternative III drawings for this area. The right-of-way drawing in this area for the 1992 LPA, not Alternative III, is correct.

105.5. With respect to Alternative VI plans that we have seen, the tracks need to be moved further away from our property line in the direction of Kaiser Hospital, as plans we have seen presently show in Alternatives II, LPA, IV, V, V-A, and V-B.

**Response.** Alternative VI uses the same horizontal alignment in this area as the proposed project, Alternative III, IV, V, the 1995 LPA, and their design options. Please refer to Figure 1, page 75, of the Design Appendix showing the 1995 LPA horizontal alignment in the vicinity of the property line. Copies of this Design Appendix are available at all libraries in San Mateo County.

105.6. Our buildings are both built on piers with parking underneath. We are deeply concerned about the severe adverse impact that the vibrations from the trains after construction, as well as those vibrations from the construction process itself....Would tunneling have less of an impact?

**Response.** Based on the current analysis of the effects of train operation, 1131-1135 Mission Road would experience groundborne vibration impacts, although the use of resilient ties or soft fasteners on the BART trackway would mitigate these operational vibration levels to below a significant level. Further analysis would be performed during preliminary design, and other appropriate mitigation measures would be implemented if necessary. If pile drivers (impact or vibratory) are used, there would be the potential for perceptible construction vibration impacts. Building damage from construction, however, would not be expected. Pile drivers would generate the highest levels of vibration of any construction method. Tunneling is not an option in this area due to high costs. In general, tunnel construction is feasible only where cut-and-cover construction is impossible due to depth, soil conditions, or uninterrupted surface activities such as freeway or airports. In addition, please refer to Response 17.68 for additional discussion of tunneling.

105.7. We are deeply concerned about the view from the offices....We do not want to lose any of the 30-year-old trees around the property as this would seriously affect the value of our property to all concerned.

**Response.** Under all the BART build alternatives except the Base Case Alternative, the alignment would pass behind the dental offices in a subway configuration. For the Base Case Alternative, Impact 5 on Page 3.3-49 of the DEIR/Technical Appendix describes the effects of the retained cut behind the office development between Evergreen Drive and Holly Avenue. Trees on private property would not be removed; trees within the proposed BART right-of-way may be removed. As a result, there would be intermittent views of the BART retaining wall and fence from Mission Road. Please refer to Response 72.213 for discussion of landscaping.

- 105.8. We were not able to clearly determine where and how any air-ventilation shaft locations would impact our property in particular with respect to view as well as noise.

**Response.** Relative to the dental offices, the nearest ventilation shafts would be south of Colma Creek and at the north and south end of the Hickey Station. Neither of these ventilation shafts would be visible from the dental offices. The ventilation shaft south of Colma Creek would appear approximately 2 feet above ground and the one at the Hickey Station would be located at the end of the platform approximately 15 feet above the ground. The Hickey Station would be located about 800 feet north of the offices.

The air ventilation shaft, for all build alternatives except Alternative III, is considered an "ancillary" facility, and would be designed according to the noise criterion contained in BART's system design criteria (please refer to DEIR/Technical Appendix, page 3.9-14). The vent shafts would emit noise only during a train passby.

- 105.9. The visual detraction of fencing and/or a BART trench would present a major adverse impact for our property and its location. A Retained-Cut option with no trees for concealment would be an unthinkable option.

**Response.** Please refer to Response 105.7 for the visual effects of the retained cut alignment on the dental offices.

- 105.10. We expect any increased traffic in the area of these stations in general and along Mission Road and Chestnut Avenue in particular to have a very serious adverse impact on our businesses and our properties. We are concerned for the safety of our patients as we see this increased traffic in front of our offices as a clear hazard to our patients crossing the street or turning (driving) into the driveway to the properties.

**Response.** Comparisons of traffic on Mission Road and Chestnut Avenue between the No Build Alternative and the BART build alternatives indicate that traffic on Mission Road would decrease north of the Hickey BART station and generally decrease south of the station, except northbound between Grand Avenue and the BART station during the A.M. peak hour. In this case, traffic would increase from an estimated 640 northbound vehicles under the No Build Alternative to 720 northbound vehicles under the Alternative VI LPA in 2010. The comparisons of traffic on Chestnut Avenue/Westborough Boulevard between the No Build Alternative and the BART build alternatives indicate that the traffic would decrease on this roadway with the build alternatives between the intersections with Hillside Boulevard and Junipero Serra Boulevard. The largest

decrease in traffic along Chestnut Avenue would be between the intersections with Mission Road and El Camino Real where in 2010 during the A.M. peak hour, the traffic is estimated to decrease from 2,250 vehicles per hour (vph) under the No Build Alternative to 1,650 vph under the Alternative VI LPA, and during the P.M. peak hour from 2,500 under the No Build Alternative to 1,950 vph under the Alternative VI LPA. This decrease in traffic is partially due to the inclusion of the extension of Hickey Boulevard between El Camino Real and Hillside Boulevard, which reduced traffic along Chestnut Avenue and Westborough Boulevard, and partially due to the proposed BART stations that cause redistribution in traffic to other roadways. A major benefit for the neighborhood traffic circulation would be the improvement in the level of traffic service at the major El Camino Real and Chestnut Avenue intersection, which during the P.M. peak hour would improve from an estimated LOS E under to No Build Alternative to LOS C with the Hickey Boulevard extension.

- 105.11. The Chestnut Avenue/Antoinette Lane/Mission Road/El Camino Real corridor has a long history of congestion problems already. Mission Road itself was never designed or intended to be a high-capacity automobile or pedestrian or bus route, which it will become with a BART Station there. It would mitigate this situation if El Camino Real was made the main entrance to the Hickey Station....

**Response.** Access to Hickey Station would be available from both El Camino Real and Mission Road. BART patrons traveling to the Hickey Station from neighborhoods east of the station would use both Mission Road and El Camino Real to access the station. The intersections of Mission/New Street and Mission/Kiss-and-Ride Entrance would serve only patrons traveling from the east side.

Comparisons of traffic at the intersection of Mission Road and Chestnut Avenue between the No Build Alternative and the BART build alternatives indicate that traffic on both roadways would decrease with a BART build alternative. This decline would not be related to the BART extension, but rather to the inclusion of the extension of Hickey Boulevard between El Camino Real and Hillside Boulevard. Please refer to Response 105.10 for a discussion of the benefits to Chestnut Avenue between El Camino Real and Mission Road.

- 105.12. ...We could not find where or how BART was addressing the fact that the Hickey Station parking area will become a "surrogate" airport parking area.

**Response.** Mitigation Measures 6.1, Parking Restrictions, and 6.2, Pricing Surcharge and Other Administrative Mechanisms, under the analysis of parking section for the proposed project on page 3.1-169 in the DEIR/Technical Appendix describes measures to prevent air passengers from parking at BART stations. The same measures are also included under all other BART build alternatives. Please refer to Response 10.10 for further discussion of preventing airline passenger parking at the BART-San Francisco Airport Extension stations, which includes the Hickey Station.

- 105.13. We are also very apprehensive about the increased crime and parking problems that will be brought to our vicinity by these BART stations in South San Francisco. Our proximity to either station will cause us problems with security to our property in general, as well as parking control and parking security in particular at our properties.

**Response.** Please refer to Responses 16.106 and 86.2 for a discussion of measures to be incorporated into the design of the station and parking facilities to minimize crime incidents. Although each of the BART extension parking facilities are designed to accommodate more than the projected demand, BART and SamTrans are developing parking management policies to further reduce the potential for "spillover parking" into residential and commercial areas near stations.

- 105.14. [During construction]...dust and dirt pollution [would impact] on our ability to maintain a sterile environment in our treatment areas.

**Response.** As described on pages 3.13-198 to 3.13-200 of the DEIR/Technical Appendix, and in Response 19.134, a variety of mitigation measures can be used to minimize emission of dust and PM<sub>10</sub> during construction. Despite the anticipated use of these measures, construction-related PM<sub>10</sub> emissions are considered significant because total emissions will exceed the significant threshold of 1 ton/ per year and could cause temporary, localized exceedances of the state or federal PM<sub>10</sub> air quality standard.

It is possible that small amounts of construction dust will enter structures, although indoor dust concentrations would typically be much lower than those in outdoor air due to the air exchange restrictions imposed by the building structure. This is not considered a significant impact.

- 105.15. [During construction]...traffic congestion that would [impact] prevent or make access difficult to our property via Chestnut Avenue, as this could destroy all of our businesses creating unemployment for our tenants and their staffs

**Response.** Chestnut Avenue would remain open throughout construction under all of the BART build alternatives. Roadway lane closures and detours are described on pages 3.13-9 and 3.13-11 of the DEIR/Technical Appendix. During construction of the BART alignment under Chestnut Avenue, half of the roadway would be closed, with two-way traffic provided on the other half. The closed portion of the roadway would then be excavated, shored, and decked in approximately one month depending upon the extent of utility relocation required. Two-way traffic would then be shifted to the decked portion while the other half is being excavated, shored and decked. Traffic would be routed on the temporary decking for approximately nine to 12 months while the subway box is constructed below the decking. Traffic would be restricted on Chestnut Avenue to four or three lanes for approximately two to four months after which all lanes would be reopened.

As described on page 3.2-57 of the DEIR/Technical Appendix, BART/SamTrans would address demonstrable loss of income to businesses in accordance with State and federal relocation laws as applicable. However, businesses may be eligible for Relocation Assistance Benefits as established under Uniform Relocation Assistance Act of 1970 and comparable California relocation laws. Please refer also to Response 66.158.

- 105.16. [During construction]...noise (pile drivers, etc.) and construction vibration...would create medical (physical) safety problems for our tenants, their staff and their patients.

**Response.** BART specifications limit the amount of noise allowed by contractors. Excessive vibrations can be mitigated by predrilling and driving the pile a few feet. In addition, advance consultation with Kaiser Medical Center and coordination between Kaiser Medical Center and BART has been established. Specific evaluation of the effects of operational noise and vibration from BART trains is ongoing and further coordination is expected to appraise Kaiser of these effects. Please refer to Response 151.9 for a more detailed discussion of this topic.

- 105.17. ...We do not see enough benefits of a BART extension to the airport to offset the problems and costs such a scheme would bring. We vote that a No-Build Alternative is the correct choice.

**Response.** The commentor's general opposition to the project is noted. Public input regarding the merits of the various alternatives was considered by BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process.

- 105.18. We recommend that the study to improve and extend CalTrain to the downtown area of San Francisco should be completed and considered as the best solution.

**Response.** The commentor's general opposition to the project is noted. A CalTrain upgrade in the Peninsula corridor, including more frequent service and possible electrification of the line, was evaluated in the 1990, Phase 1 BART-San Francisco Airport Extension/CalTrain Upgrade Pre-Alternatives Analysis/DEIS, during the screening process for the AA/DEIS/DEIR, and in the DEIR/SDEIS screening of alternatives.

In January 1990, the MTC Policy Committee for the Pre-Alternatives Analysis study accepted staff's recommendation to reject the upgraded CalTrain as an alternative for consideration in the formal Alternatives Analysis process. The reasons for rejecting the upgraded CalTrain alternative were 1) funding for these improvements exceeded identified funding for rail extensions; 2) cost-effectiveness indices did not meet UMTA thresholds; and 3) relocation of the downtown San Francisco terminal would be evaluated in the Alternatives Analysis study in the TSM Alternative.

Public input regarding the merits of the various alternatives was considered by BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process.

106. DOWNING, LORRAINE, C.

- 106.1. Please, please don't let BART tear down Millbrae Nursery School, its yard and heritage trees!

**Response.** The Millbrae Nursery School would be displaced only under Alternatives IV and V, as well as under Design Options V-A and V-B. These and other impacts were considered by the BART and SamTrans boards during the LPA selection process in November 1995. Please refer to Response 2.7 for a discussion of the LPA selection process. The Alternative VI Aerial Design Option, selected as the LPA by both boards, would not displace the nursery school.

107. DREILING, MARTIN L.

- 107.1. Analysis on a region wide basis would reveal alternative corridors and methods that are much more cost effective than the alternatives presented here. Since Federal funding is involved, administered by the MTC, BART should not be favored. The MTC should take the lead in developing projects based on actual regional and local needs and then seek applicants to fulfill those projects.

**Response.** The analysis of the region for alternative corridors and the selection of projects for further advancement fall under the domain of the Metropolitan Transportation Commission (MTC). MTC is the regional transportation planning agency, composed of local government officials from all nine counties of the Bay Area. On March 24, 1989, the MTC approved Resolution No. 1876, which established the New Rail Starts and Extension Program for the nine-county San Francisco Bay Area. MTC Resolution No. 1876 defines the regional rail program for the San Francisco Bay Area.

Resolution No. 1876 established the BART-San Francisco Airport corridor as one of the high priority projects under the regional rail program. In addition to the BART extension, the program calls for the extension of CalTrain to downtown San Francisco; construction of a light rail extension along the Tasman corridor in Santa Clara County; construction of the BART West Pittsburg and Dublin-Pleasanton extensions in the East Bay; continued evaluation of a number of additional rail extensions for BART, CalTrain, Santa Clara County Transit, and San Francisco Muni; and the preservation of rights-of-way that have the potential for future rail lines. The program also commits to further planning for an additional \$1.9 billion in long-term projects that would add additional branches to Santa Clara County Transit's Guadalupe Corridor light rail system; construct a rapid transit system in Marin and Sonoma counties; construct "people movers" to the Oakland and San Francisco International Airports; develop a historic streetcar line along San Francisco's waterfront; and extend CalTrain south to Gilroy. All of these projects currently are in different stages of development.

- 107.2. Ridership numbers throughout the EIR include existing transit riders shifted or transferred from other modes....These passengers should not be considered "New Transit Riders"....This would effectively increase by a substantial amount the cost per new transit rider of the LPA or any other build alternative.

**Response.** In calculating the Cost Effectiveness Index, "new transit riders" were estimated correctly. A person who rides CalTrain today but rides BART after opening of the extension is not included in the total of new transit riders. Moreover, a CalTrain rider who transfers to BART at Millbrae is counted as a single transit rider. The cost per new transit rider therefore should not be increased.

- 107.3. Section 1.3 describes the "Need For Project" criteria...None of these needs indicate a BART response exclusively. Each need could be satisfied by TSM and expanded/upgraded CalTrain except "Public Mandate."

**Response.** The Need For The Project, Section 1.3 of the DEIR/Technical Appendix, identifies three key reasons the BART extension is being advanced: 1) to alleviate highway congestion; 2) to improve air quality; and 3) to carry out the public mandate for the project.

A TSM project with an expanded/upgraded CalTrain: 1) would reduce highway congestion, but would not provide a convenient transfer point between CalTrain and BART, as discussed in Section 1.3; 2) would improve air quality; and 3) would not satisfy the public mandate for the project.

A TSM Alternative with an expanded/upgraded CalTrain would not provide a convenient connection or transfer point between CalTrain and BART in San Mateo County that would give rail commuters an opportunity to use either CalTrain or BART.

The extension of CalTrain to downtown San Francisco and upgrades (including electrification) are the topics of another study. The CalTrain San Francisco Downtown Extension/System Upgrades Final Report (March 1994) was sponsored by MTC and the Peninsula Corridor Joint Powers Board (the CalTrain governing board). In March 1994, the Peninsula Corridor Joint Powers Board selected Alternative 8B-Surface/Subway to Market and Beale Streets with electrification of CalTrain as the Locally Preferred Alternative. The Peninsula Corridor Joint Powers Board has selected I.C.F. Kaiser/De Leuw Cather to prepare an EIS/EIR on the CalTrain LPA and Alternatives.

- 107.4. Under "Opportunities for Highway Expansion" limited ROW is offered as a limitation to alternatives. This criteria should also be extended to rail expansion. It is not clearly noted that the existing CalTrain system has a complete ROW established including station and support uses as well as existing adjacent land use patterns.

**Response.** Section 1.3 of the DEIR/SDEIS notes that there is limited opportunity to increase highway capacity in the corridor because of expensive right-of-way requirements and significant environmental and community obstacles. The section goes on to note that, while BART faces environmental and community obstacles, it would largely operate within an existing rail corridor, thereby minimizing costly land acquisition and displacement caused by highway widening. CalTrain also has the same benefits of expansion over freeways, as it operates within existing stations and rights-of-way. Although expanding CalTrain would require grade separations and probably require expanded parking facilities at stations, it would also minimize the potential for costly land acquisition and displacement caused by highway widening.

- 107.5. "Public Mandate" is based on support of BART only proposals by the public via a political and public relations process. The public was not fully informed about costs, service and regional impacts when this "mandate" was fashioned. The "mandate" was created prior to the EIR and the release of any substantial public information.

**Response.** The public mandate was developed at the project planning stage, thereby allowing more detailed analysis of the alternatives to proceed.

- 107.7. The BART build proposals fail to meet Goal 1 [regarding] congestion. The BART proposals create more traffic congestion on most highways and streets.

**Response.** Please refer to Response 14.7 for a discussion of the comparative ability of the LPA and the other alternatives to satisfy the stated goals. All of the BART build alternatives would achieve the objective of relieving increased congestion on the highway and street system by promoting alternatives to single-occupant automobiles. Although the BART alternatives would generate traffic around stations and south of the end-of-line station during the P.M. peak hour, each BART alternative would reduce total vehicle miles traveled in the region overall by approximately 485,000 compared to the No Build Alternative in the year 2010, according to

estimates provided by MTC. This reduction would relieve traffic congestion and help achieve and maintain improved air quality.

- 107.8. The BART build proposals fail to meet Goal 1 [regarding] coordinated transit system. The BART alternatives do not encourage a coordinated transit system, but actually fragment and weaken the existing rail transit system on the peninsula.

**Response.** Please refer to response 14.7 for a discussion of the comparative ability of the LPA and for the other alternatives to satisfy the stated goals. All BART build alternatives would achieve the Goal 1 objective of developing a coordinated transit system that links local and regional transit systems. All of the BART build alternatives would provide intermodal connections with SamTrans, CalTrain, and the Airport Light Rail System and thus provide a coordinated transit system that links local and regional transit systems. A transfer between BART and CalTrain has been one of the underlying factors in the definition of all BART build alternatives carried forward for evaluation in the DEIR/SDEIS. Another BART objective is to have coordinated schedules that will minimize wait time between BART and other transit systems, particularly the other rail systems.

BART complements, rather than fragments or weakens, the existing transit system. BART and CalTrain serve different markets. They are complementary, not competing, systems. MTC predicts that all of the BART alternatives would result in increases in CalTrain ridership. CalTrain ridership would increase from about 38,000 to 47,000 total daily boardings in the year 2010 under all BART build alternatives. CalTrain ridership would increase under all build alternatives examined in the DEIR/SDEIS, due to projected growth in the region, physical improvements, service improvements, and the provision of a CalTrain/BART transfer.

- 107.9. The BART build proposals fail to meet Goal 2 [regarding] natural impacts. The build alternatives do not minimize adverse impacts on the natural resources of the corridor.

**Response.** Please refer to Response 14.7 for a discussion of the comparative ability of the LPA and alternatives to satisfy the stated goals. The BART build alternatives would achieve the Goal 2 objective of minimizing potential adverse impacts to the corridor's natural resources, particularly wetlands and habitat for identified endangered species, with varying degrees of success. Alternative VI (with the Millbrae tunnel construction laydown area option) would be superior in achieving this objective. Construction of any alternative would require approvals by the U.S. Fish and Wildlife Service, Department of Fish and Game (CDFG), and the U.S. Environmental Protection Agency because of potential impacts to endangered species. Based on the comment letters and informal consultation, the CDFG recommended Alternative VI as the Least Environmentally Damaging Practicable Alternative (LEDPA). Please refer to Response 3.1 for discussion regarding the selection of a subsequent alternative proposed as the LEDPA. Alternative VI was deemed too costly, and the Aerial Design Option to Alternative VI has been selected as the preferred project. The CDFG commented that alternatives with an intermodal transit station west of Highway 101 (the proposed project and its Least-Cost I-380 Design Option, the TSM Alternative, and Alternative III) would probably result in loss and disruption to prime habitat for the San Francisco garter snake, an endangered species. Alternatives IV and V, with intermodal facilities in Millbrae, would have some impacts to prime habitat, as would Design Options V-A and V-B.

As noted in Response 107.7, the BART build alternatives would reduce overall vehicle miles traveled in the region, thus minimizing air quality and energy impacts.

- 107.10. The BART build proposals fail to meet Goal 2 [regarding] impacts on built environment. The BART proposals will generate massive and undisclosed impacts on the built environment of local communities, particularly by stimulating speculation and growth that is unrelated to existing and preferred local patterns.

**Response.** Please refer to Response 14.7 for a discussion of the comparative ability of the LPA and alternatives to satisfy the stated goals. The BART build alternatives would achieve the Goal 2 objective of minimizing potential adverse impacts to the built environment with varying degrees of success. The impacts on the built environment of local communities are fully documented in Section 3.2, Land Use and Economic Activity, of the Summary DEIR/SDEIS.

The proposed project, Alternatives IV and V and their design options, and the Alternative VI subway alignment through Colma and South San Francisco would minimize potential adverse impacts to the built environment. The proposed project and its design option would displace approximately 120 residences and fragment the Fifth Addition neighborhood.

The No Build and TSM Alternatives would meet the objective of minimizing disruption to the existing land uses. The Alternative III retained cut alignment through Colma and South San Francisco and the aerial alignment through downtown San Bruno would disturb the neighborhood character and conflict with Colma, South San Francisco, and San Bruno general plans. Furthermore, Alternative III would not minimize disruption to existing land uses. The Alternative IV aerial alignment along San Bruno Avenue would introduce a physical barrier through the Belle Air neighborhood and the Millbrae Intermodal Station at Center Street, thereby isolating the Marino Vista and North Millbrae neighborhoods while failing to minimize disruption to existing land uses.

The Alternative V I-380 or Downtown San Bruno Stations would impact the Belle Air neighborhood in San Bruno, and the Millbrae Intermodal Station at Center Street would isolate the Marino Vista and North Millbrae neighborhoods. The Design Option V-A and V-B I-380 or Downtown San Bruno Stations would impact the Belle Air neighborhood, but would otherwise be consistent with general plans and adequately fulfill the objective of minimizing disruption to existing land uses. Alternative VI would be consistent with Colma, South San Francisco, and San Bruno general plans but would be inconsistent with the Millbrae General Plan. Overall, Alternative VI is rated "high" for this objective of minimizing disruption to the existing land uses.

Section 4.5 of the DEIR/Technical Appendix fully documents the growth-inducing impacts of the project alternatives. As described in Section 4.5, the alternatives would not generate massive and undisclosed impacts on the built environment of local communities resulting from speculation and growth. The jobs and station area development growth-inducing impacts of the proposed project are documented on page 4-27 of the DEIR/Technical Appendix. There would be few examples of BART stimulating growth and speculation. The largest growth around BART stations has occurred in Walnut Creek and Concord, cities that have been the focus of recent urban development outside of station areas as well. Other cities, such as Daly City, Hayward, and Fremont, are still waiting for "station-related development" to occur. Cities that have not wanted development in station areas, such as around North Berkeley, Rockridge, or Lafayette, have not had difficulty resisting "speculation and growth that is unrelated to existing and preferred local patterns."

107.11. The BART build proposals fail to meet Goal 3 [regarding] displacement. The BART alternatives will generate massive disruptions of existing land use and will in no way minimize displacement.

**Response.** Please refer to Response 14.7 for a discussion of the comparative ability of the LPA and alternatives to satisfy the stated goals. The BART build alternatives would achieve the Goal 3 objective of minimizing displacement and disruption of existing land uses with varying degrees of success. Disruption to existing land uses is described in Response 107.10. Displacement of residents and employees is summarized in Tables 3.2-3 and 3.2-5 of the Summary DEIR/SDEIS. Displacement of residential units would range from zero for the No Build, the TSM Alternative, and Alternative III, to 236 under Alternative V with the Downtown San Bruno Station option. Displacement of businesses would range from zero for the No Build and TSM Alternatives to 46 under Alternative IV with the I-380 San Bruno Station option. Overall, the No Build and TSM Alternatives are rated "high"; the proposed project, its design

option, and Alternative III are rated "medium"; and Alternative IV, Alternative V and its design options, and Alternative VI are rated "low" in achieving this objective.

- 107.12. The BART build proposals fail to meet Goal 3 [regarding] disturbance to neighborhood character. The BART alternatives will create significant disturbance to existing neighborhood character, mostly due to station size and usage changes.

**Response.** Please refer to Response 14.7 for a discussion of the comparative ability of the LPA and alternatives to satisfy the stated goals. The BART build alternatives would achieve the Goal 3 objectives of minimizing disturbances resulting from significant changes in traffic flow, introduction of facilities that are out of scale with existing development, loss of important social or recreational facilities, and disruption of well-defined pedestrian areas with varying degrees of success. The proposed project, Alternatives IV and V, their design options, and the Alternative VI subway alignment through Colma and South San Francisco would minimize disturbances to neighborhood character. The proposed project and its design option would displace approximately 120 residences and fragment the Fifth Addition, and overall are rated "medium" in achieving this objective.

The No Build and TSM Alternatives would meet the objective of minimizing disturbances to neighborhood character, but overall would not meet Goal 3 of providing a transportation system that is integrated with adjacent land uses and planned development. The Alternative III retained-cut alignment through Colma and South San Francisco and the aerial alignment through downtown San Bruno would disturb the neighborhood character and conflict with Colma, South San Francisco, and San Bruno general plans. The Alternative IV aerial alignment along San Bruno Avenue would impact the Belle Air neighborhood. Alternative VI would be consistent with Colma, South San Francisco, and San Bruno general plans but would be inconsistent with Millbrae's General Plan. Overall, Alternatives I, II and VI are rated "high" for the objective of minimizing disturbances to neighborhood character, but they would not satisfy Goal 3.

- 107.13. The BART build proposals fail to meet Goal 4, investigate low cost design. The proposals ignore low cost design options such as use of existing transit facilities by existing transit operators or the upgrade of existing systems.

**Response.** Please refer to Response 14.7 for a discussion of the comparative ability of the LPA and alternatives to satisfy the stated goals. Overall, the BART alternatives would not satisfy the Goal 4 objective of investigating opportunities to identify low-cost options in the development of transportation facilities. Alternative III with an open, retained-cut alignment through Colma and South San Francisco and an aerial alignment through downtown San Bruno would satisfy this objective. The Least-Cost Design Option to the proposed project, with an aerial alignment adjacent to the Fifth Addition neighborhood and open, retained-cut alignment east of the Belle Air neighborhood, would also satisfy this objective. Design Option V-B, which ends in downtown San Bruno and has only two stations, would also satisfy the objective of investigating lower cost options.

The use of existing SamTrans and CalTrain transit facilities is incorporated in all alternatives and is explicitly evaluated under the No Build Alternative. The upgrade of CalTrain is the topic of the CalTrain San Francisco Downtown Extension/System Upgrades Final Report (March 1994).

- 107.14. The BART build proposals fail to meet Goal 5 [regarding] fair distribution of costs. The BART build proposals do nothing to promote a fair distribution of costs. Most of those paying for the system will still have to drive long distances to any BART station.

**Response.** Please refer to Response 14.7 for a discussion of the comparative ability of the 1992 LPA and alternatives to satisfy the stated goals. Each BART build alternative ranks "high" in terms of Goal 5 (Equity) in that it would achieve the goal of providing a transportation system that effectively meets the needs of all social groups, particularly the poor, the elderly, the disabled,

the young, and other transportation-disadvantaged groups. SamTrans has committed to providing feeder bus service to all stations on the extension. All BART alternatives would also meet the Goal 5 objective of increasing the mobility of the transportation disadvantaged. All of the BART alternatives were rated "medium" in the objective of seeking a fair distribution of costs and benefits among various social groups in the corridor.

Of the approximately \$99 million that SamTrans has proposed to pay for the capital cost of the system, central and southern San Mateo County would bear a disproportionate share of the cost. The BART-San Francisco Airport Extension would primarily serve commuters from the northern third of San Mateo County, who would travel to work in San Francisco, and to a lesser extent those in central and southern San Mateo County, who are less likely to travel to San Francisco for work. Patrons from central and southern San Mateo County, would either need to drive to a BART station or take CalTrain and transfer to BART.

Annual incremental operating costs for the Alternative VI LPA are estimated at \$35.3 million (in 1993 dollars) in 2010. The farebox recovery rate for the BART-San Francisco Airport Extension is estimated at 85 percent, based on projected ridership and revenue estimates. This amount is estimated at \$3.2 million in 1998 and \$5.5 million (in 1993 dollars) in 2010. In accordance with revisions to the BART/SamTrans Comprehensive Agreement, a surcharge may be imposed by mutual agreement between BART and SamTrans at most BART extension stations in order to meet the operating expense obligation.

The conceptual cost estimates were created using MTC's cost estimates, the BART extension's unit-cost database, and conceptual and partial preliminary engineering information. The unit-cost database was developed from the experience of the three BART extension projects currently under construction. The ability to rely on current, geographic-specific, contractor-specific cost information for a major, public sector construction project is very uncommon and lends greater-than-usual certainty to the conceptual costs.

Please also refer to Response 30.9 for a discussion of contingencies and reserves.

- 107.15. The BART build proposals fail to meet Goal 6 [regarding] consistency with federal and local goals. BART has failed at designing a system that is consistent with federal, state and local goals for sound transit and community planning.

**Response.** Please refer to Response 14.7 for a discussion of the comparative ability of the LPA and alternatives to satisfy the stated goals. Overall, Alternative VI and the Aerial Design Option receive a "high" ranking in terms of maximizing community acceptance and political institutional support for the project. The cities of Daly City, South San Francisco, San Bruno, Millbrae, and the Town of Colma have all passed resolutions supporting the project with certain design modifications. The City of Burlingame opposes Alternative VI and its design option, and supports instead the TSM Alternative, with a new San Bruno/CalTrain station located west of Highway 101 and connected to the Airport by the Airport Light Rail System. Alternative VI and the Aerial Design Option have by far the greatest community and institutional support.

The City of San Bruno and the Tanforan Park Shopping Center opposed the Tanforan Station (under the proposed project and Alternative III) during the Alternatives Analysis process. Alternative III with retained-cut alignment through Colma and South San Francisco and an aerial alignment through downtown San Bruno was opposed by the Town of Colma and the cities of South San Francisco and San Bruno at the conclusion of the Alternatives Analysis study. The San Bruno Belle Air neighborhood expressed opposition to the I-380 and Downtown San Bruno Station options under Alternatives IV and V and their design options. The Millbrae City Council opposed the Millbrae Intermodal Center Street Station under Alternatives IV and V.

The BART extension is a top-priority project and is consistent with MTC's Resolution No. 1876, the New Rail Starts and Extension Program for the nine-county San Francisco Bay Area. The

BART extension is consistent with other regional plans in that it has been named by the Bay Area Air Quality Management District as one of the region's key transportation-related measures aimed at achieving and maintaining improved air quality standards.

With regard to federal "goals" for transit planning, the federal government has demonstrated support for the BART extension through authorization of funding. The Intermodal Surface Transportation and Efficiency Act of 1991 (ISTEA) authorizes \$568.5 million in FTA Section 3 New Starts funds for expenditure between FFY 1990 and FFY 1997 on BART's Colma and San Francisco Airport Extensions and the Santa Clara County Transit District's Tasman Corridor light rail project. Section 3032 of ISTEA also authorizes the Secretary of Transportation "to execute Full Funding Grant Agreements to complete the projects utilizing the full amount of the unobligated balance in the Mass Transit account of the Highway Transit Fund."

- 107.16. The BART build proposals fail to meet Goal 6 [regarding] participation. BART has ignored its obligation to create and present a plan and a process that is accessible to the public who will pay for it.

**Response.** Please refer to Response 14.7 for a discussion of the comparative ability of the LPA and alternatives to satisfy the stated goals. BART and SamTrans are following a process that meets the objective of providing an open and understandable public participation process in the development of transportation plans. The public participation process followed for this DEIR/SDEIS is summarized in Chapter 8, Community Participation, of the DEIR/Technical Appendix.

Since July 1992, when BART and SamTrans assumed primary responsibility for the environmental and engineering processes, the commitment to community involvement has been maintained. Community participation was important during the scoping process for the DEIR/SDEIS. A project newsletter was mailed to over 4,000 people to invite them to the scoping meeting and to provide background information on the extension. Additional participation was solicited through newspaper notices, press releases, and San Mateo County postings. At the scoping meeting, BART and SamTrans staff presented the project alternatives, preliminary environmental impacts, and the environmental review process. The public offered comments on the alternatives, other potential impacts, and areas of concern to be addressed in the DEIR/SDEIS.

Following the initial scoping meeting, BART and SamTrans staff conducted months of outreach work with city staff, elected officials, and communities in Colma, South San Francisco, San Bruno, Millbrae, and Burlingame. The communities were informed of the project status through a full-time Community Information Center in the study area, meeting notices, newsprint media, a project newsletter, fact sheets, an Open House Month (June 1994), and a local project hotline. Public presentations were given to community coalitions, citizen advisory committees, local school districts, civic organizations, public works coordinators, city managers, mayors and other elected officials, and State and federal resource agencies.

Following release of the DEIR/SDEIS on January 13, 1995, written comments on the DEIR/SDEIS were accepted for 60 days, and verbal comments were recorded at three public hearings. After the comment period on the DEIR/SDEIS, the public had additional opportunities to comment on a proposed project during the following meetings: 1) a SamTrans board Meeting discussion session on April 19; 2) a BART Engineering and Operations Committee meeting on April 25; 3) a BART Board meeting on April 27 and April 28; and 4) a SamTrans board meeting on April 28.

The public submitted approximately 300 written comment letters, including approximately 2,300 individual comments, on the DEIR/SDEIS during the 60-day public comment period. Approximately 50 letters from local citizens registering support for Alternative VI were mailed to the BART and SamTrans Boards of Directors in April, 1995. Approximately 2,300 current BART riders expressed written support for a BART extension to the airport during April, 1995.

The FTA's process for developing, screening, and refining transit alternatives is presented in Section 1.1, Historical Overview, of the DEIR/SDEIS. MTC, BART, and SamTrans have adhered to this federal Alternatives Analysis process.

The costs of the alternatives and the funding sources are described in Chapter 6, Financial Analysis, of the DEIR/SDEIS.

- 107.17. The BART build proposals fail to meet Goal 7 [regarding] convenient services. BART has failed to develop a proposal that is convenient for users in any consistent way. It is only convenient for automobiles.

**Response.** Please refer to Response 14.7 for a discussion of the comparative ability of the LPA and alternatives to satisfy the stated goals. The alternatives considered in the DEIR/SDEIS meet the Goal 7 objective of being convenient for passengers. These alternatives also meet Goal 7 to provide an effective addition to the regional transit system. All of the BART build alternatives provide for intermodal connections with CalTrain, SamTrans, and the Airport Light Rail System. Passenger pick-up and drop-off access and facilities for the handicapped are provided at all BART stations. Parking is provided at all of the BART build stations, except the Airport GTC Station under Design Option V-A and the Airport International Terminal Station under Alternative VI.

As stated in Response 107.8, one objective of the BART build alternatives is to provide a coordinated transit system between BART and other transit systems. BART also provides convenient auto access to patrons parking at a station or who are dropped off by another driver.

- 107.18. The BART build proposals fail to meet Goal 6 [regarding] minimiz[ing] travel time. The build proposals do not minimize travel time. The BART route takes the long way from San Francisco to the airport.

**Response.** It is assumed the commentor is referring to goal 8; goal 6 addresses community and institutional considerations. Please refer to Response 14.7 for a discussion of the comparative ability of the LPA and alternatives to satisfy the stated goals. Transit travel times for the build alternatives versus the No Build Alternative between selected origin-destination pairs are shown in Chapter 3.1, Transportation, of the DEIR/Technical Appendix. For example, Table 3.1-63 shows transit travel times for Alternative VI. Compared to the No Build Alternative, travel times would generally be faster. In most cases (45 of 49 origin-destination pairs), travel times would improve or remain unchanged. Travel time includes walk- or transit-access time to the final destination and assumes utilization of the fastest transit mode (e.g., bus, CalTrain, BART, Muni Metro). The other BART build alternatives show a pattern similar to Alternative VI. Thus, provision of the BART extension would reduce travel times and thus satisfy the criteria under Goal 8 of minimizing travel times. The alignment of BART through San Francisco provides access to more densely populated areas with employment centers and universities than do other alignment alternatives.

- 107.19. The BART build proposals fail to meet Goal 8 [regarding] efficient operations. The BART alternatives do not provide for overall efficiency of operations. They require a tremendous automobile infrastructure as well as an equally large motor coach system.

**Response.** Please refer to Response 14.7 for a discussion of the comparative ability of the LPA and alternatives to satisfy the stated goals. Objectives under Goal 8 (to provide an efficient transit system) are to 1) minimize travel time and 2) provide for efficient transit operations. This goal refers to the operational efficiency of the transit system (including bus, commuter rail, rapid rail, and light rail services). All of the BART build alternatives under study were ranked high in providing an efficient transit system. Please refer to Response 107.18 for discussion of the objective of minimizing travel times.

The BART extension will provide a transit system covering 100.9 miles with the opening of the East Bay BART Extensions. Riders on BART from Alameda, Contra Costa, San Francisco, and San Mateo counties will be able to take BART to the Airport either directly or with one transfer to other transit systems. Provision of auto-user services, such as parking spaces and kiss-and-ride locations convenient to BART stations, were based on MTC's mode choice model that forecast the number of auto access BART patrons. MTC's model also forecast access to BART stations by bus (referred to as "motor coaches" in this comment), CalTrain, and pedestrians (including bicyclists).

Without the BART build alternatives, the demand on the automobile and bus systems would be even greater. BART removes automobiles from the road network. The bus system is already in place. The objective is to tailor the system so that bus and rail transit are mutually supportive. It is sound regional transportation planning to organize bus routes as a feeder system to the rail.

- 107.20. [The] Land Use, Population and Employment...section describes San Jose as [the] largest city in the metropolitan area. This should imply a link between San Jose and San Francisco as the most important current transit objective.

**Response.** While San Jose and San Francisco are respectively the largest and second largest cities in the metropolitan area, a link between San Jose and San Francisco is not necessarily the most important transit objective. MTC Resolution No. 1876 identified regional priorities for transit development; the resolution identifies the extension of CalTrain to downtown San Francisco as a top priority project. Please refer to Response 107.1 for additional discussion of CalTrain.

- 107.21. Figure 2.1-2 [of the DEIR/Technical Appendix] - [The Region] map is designed to make the CalTrain route look superfluous. The map implies that nothing happens south of San Mateo.

**Response.** Figure 2.1-2 in the DEIR/Technical Appendix is meant to show only the existing project area and the existing regional transportation corridors. The figure depicts current alignments and shows CalTrain and highway locations both north and south of San Mateo. Existing BART and CalTrain routes are shown for reference purposes.

- 107.22. [The] System Descriptions...section states that daily BART ridership into San Francisco is 25,100 for early 1994, CalTrain is 20,800 in 1992-93. It should be clearer that these are boardings. Each round-trip by one rider counts as two boardings. When dealing with commute passengers, round trips are typically assumed.

**Response.** The numbers referred to are boardings, defined as the total number of individuals entering transit vehicles from all sources. Ridership is similarly defined as the number of individuals entering transit vehicles. A round trip is two separate trips, with each boarding counted separately.

The commentor is referring to transit patronage data on page 2-7 of the DEIR/Technical Appendix. The data states that daily ridership on BART averages 251,000, not 25,100, passengers per weekday during the first six months of 1994. The figure of 20,800 average weekday ridership for CalTrain is correct. These are systemwide patronage figures for BART and CalTrain and are not for ridership to San Francisco.

- 107.23. This [LPA] alternative includes relocation of CalTrain in San Bruno away from the city center. This is inconsistent with typical transit planning objectives.

**Response.** The definition of the proposed project includes relocating the existing CalTrain San Bruno Station from about 0.4 mile south of downtown to a new site under I-380, about 0.4 mile north of downtown. The proposed project also includes a BART/CalTrain/Airport Light Rail/SamTrans station west of Highway 101 and adjacent to the Lomita Park neighborhood in San

- Bruno. Considering that the new San Bruno station is still close to downtown, and there would be two CalTrain stations in San Bruno under the proposed project, the proposed project is not inconsistent with transit planning objectives in this regard.
- 107.24. The No Build Alternative assumes that BART ridership at Colma is based on projections only. No actual history is available for this location. Colma ridership will also subtract from Daly City ridership so that overall system increases will be lower than projected.
- Response.** MTC's patronage forecasts for Daly City and Colma reflect that some patrons would change their access point to BART after the Colma Station is opened. MTC's patronage forecasts with the BART extension include this shift of riders from Daly City to Colma.
- 107.25. No Build assumes no CalTrain extension in SF. Since this project is already in the planning stages it should be included in all alternatives. This connection will make CalTrain attractive to a much larger market and will greatly offset BART projections.
- Response.** Please refer to Response 11.6 for a discussion of the transportation-related impacts of the BART extension with the CalTrain downtown extension.
- 107.26. History is available for costs on previous BART projects. Standard overruns should be factored into these costs to arrive at an actual estimate.
- Response.** Please refer to Response 107.14 for a discussion of the use of historic cost estimates.
- 107.27. No mention of long-term maintenance, track replacement, equipment replacement. Any system must be largely rebuilt every 20-25 years as is being done currently to the existing BART system. A more expensive system will require more expensive maintenance. BART is currently requesting \$.5 billion from the MTC for track replacement.
- Response.** Operations and maintenance costs include costs of track maintenance, vehicle maintenance, and equipment replacement. These costs do not include major rehabilitation of cars.
- 107.28. Each BART alternative states that regional congestion is reduced, yet each one shows lower LOS on highways and streets. This is a substantial contradiction.
- Response.** As can be observed from the LOS levels expected under the No Build scenarios for years 1998 and 2010, the LOS deterioration noted by the commentor is due to growth, not the BART extension. Please also refer to Response 107.7 for a discussion of traffic congestion related to the BART extension.
- 107.29. Table [2.4-2 of DEIR/Technical Appendix] assumes 1993 level of service for no build. BART projections assume 1998 level of service for many projections and it is not clear if 1998 levels of demand are sometimes overlaid on 1993 service projections.
- Response.** BART service levels with the BART extension in 1998 are also used in forecasting the hypothetical case of operating the BART extension in 1993. Table 2.4-2, Comparison of Key Impacts, in the DEIR/Technical Appendix uses projections for the year 1998 throughout the table because the initial year of opening was projected to be 1998. The patronage forecasts, or "levels of demand", as stated in the comment, for 1993 is not based on the levels of demand from 1998 overlaid on the 1993 service projections.
- 107.30. Each BART alternative involves substantial displacement. TSM involves no or little displacement. Transit Planning should always seek to support existing community and

neighborhood patterns. When non-disruptive options are available they should be included to help stabilize communities and promote local growth.

**Response.** The minimization of displacement is considered in selecting a preferred alternative. However, this must be balanced against the transportation objectives, e.g., fast, convenient transit connections, for which the project alternatives were originally formulated.

Responses 107.3, 107.8, 107.15, and 107.18, plus the MTC-based investigation of Alternatives Analysis, provide substantial evidence for the merits of a BART extension. The goals and objectives defined for the extension project are presented in Table 1-2 of the DEIR/Technical Appendix.

- 107.31. Mass transit should reduce dependency on automobiles. The BART proposals support that dependency.

**Response.** More people would use transit with the BART extension reducing the public's dependency on automobiles. Table 3.1-3, Regional Transit Person Trips, in the Summary DEIR/SDEIS summarizes the increase in transit utilization for all of the alternatives analyzed in the DEIR/SDEIS. These regional transit person trips, or linked trips, discount the use of transfers by counting a trip from origin to destination as one trip no matter what transit systems may have been used. Under all BART build alternatives, linked transit trips increase by more than 20,000 trips in 2010 compared to the No Build Alternative, while under the TSM Alternative the increase is 9,600 trips in 2010.

The MTC travel demand model was used to determine travelers' choice of mode to reach their destinations. This federally-approved model is required to determine regional patronage estimates and the mode of access to the proposed BART stations. Working within these parameters, the alternatives analyzed indicated a shift of persons from roads to rails. The design of the BART stations included enough parking to ensure parking would not spill over into neighborhoods or business areas.

- 107.32. The table [2.4-2 of the DEIR/Technical Appendix] does not adequately address long-term land use impacts. It assumes changes in land use will be unrelated to BART yet patterns would be quite different in response to the TSM system. Transit facilities are integral to shaping local usage patterns. Each BART project in the Bay Area has had a massive and direct effect on local growth. Net gains in property values and intensification of use have accompanied most projects.

**Response.** Please refer to Response 107.10 regarding long-term land use impacts.

- 107.33. The kind of intensification that will accompany BART alternatives is somewhat different than the kind that will accompany TSM and expanded CalTrain service. None of this is addressed in the EIR.

**Response.** Pages 3.2-35 through 3.2-55 of the DEIR/Technical Appendix describe the nature of land use impacts that may be associated with the project alternatives. Land use impacts of the CalTrain/Airport Light Rail Station and increased CalTrain frequency under the TSM Alternative is described on pages 3.2-40 and 41 of the DEIR/Technical Appendix. The impact on South San Francisco's El Camino Corridor Redevelopment Area is discussed, as are impacts associated with potential stations at Tanforan or in downtown San Bruno. The much greater frequency of BART service and greater number of potential destinations served by BART make its potential for land use impacts greater than that associated with CalTrain.

- 107.34. Scale incompatibility is noted in each build alternative. Photos later in the report support this. The existing rail system already has stations and facilities that fit the scale and visual quality of the communities they serve.

**Response.** Existing rail service stations and facilities may fit the scale and quality of the adjacent communities. Although scale incompatibilities may exist with certain BART alignments, BART facilities will be built to be as visually compatible and harmonious as possible. BART would serve a broader population of commuters and airport travelers than the existing rail service, and would require facilities that could foster the more intensive development sought by the South San Francisco and Millbrae Redevelopment Agencies in the vicinity of the Hickey and Millbrae Avenue Stations, respectively.

- 107.35 This [Sensitive Receptors section] should also include the effects of the system on the actual riders: Massive stations, underground travel, crowding, etc. One of the ways to make transit more fully utilized is to make it an attractive experience.

**Response.** The concept of sensitive receptors in the context of assessing visual quality impacts addresses how existing land uses/viewers would have their visual setting altered by the proposed project.

Although future BART passengers are not considered sensitive receptors in this context, BART stations are designed to make traveling by BART efficient, comfortable and pleasant for BART passengers. Community integration and visual aesthetics are carefully considered in the design of both underground and above-ground stations.

- 107.36 Verify basis for air quality quantities. It is not clear that State and Federal fuel efficiency regulations for automobiles will substantially reduce emissions over the study period no matter what system is built. The effect of BART on these numbers is not significant. Refer to Section 10.

**Response.** As a preliminary matter, we note that the units for the reductions in regional emissions related to the project are not presented correctly in the DEIR/Technical Appendix. Accordingly, the first bullet of the first column of Table 2.4-2 on page 2-97 is revised to read as follows:

- Reductions in emissions from 1993 No Build by 1998 (~~000~~ 10<sup>3</sup> tons/yr)

The air quality quantities presented in Table 2.4-2 are compiled from data appearing in Chapter 3, Section 10, of the DEIR/Technical Appendix. Specifically, data identifying the reductions in regional emissions in 1998, as compared to 1993 No Build conditions, are taken from Table 3.10-6. For a description of the methodology employed in estimating these data, please refer to Page 3.10-9 of the DEIR/Technical Appendix.

The data identifying the highest predicted 1998 CO concentrations are compiled from the "8-Hour Net" tables, i.e., Tables 3.10-8, -21, -25, -29, -33, and -37. For a description of the methodology employed in estimating these quantities, please refer to page 3.10-12.

The vehicular pollutant emission factors used in the DEIR/SDEIS air quality analysis were estimated with the most recent EPA-approved model for predicting vehicular emissions in California (EMFAC7F). Vehicular pollutant emission rates are estimated by EMFACT7F to decline sharply in future years, largely due to the continual introduction of new, low emitting vehicles (due to stricter emissions standards, cleaner-burning fuels, advances in control technology, etc.) and the phasing-out of older, higher emitting vehicles. The estimated sharp reduction in pollutant emission rates in future years outweighs the estimated increases in vehicular traffic, resulting in a reduction of the total mass of air pollutant emissions from vehicles. The project will contribute to the identified emission reduction by reducing vehicle miles traveled. BART's contribution to the regional emission reductions, presented in Table 2.4-2, can be identified in Table 3.10-5 of the DEIR/Technical Appendix. For example, a comparison of anticipated annual CO emissions in 1998 for the Alternative VI LPA and Alternative I-No Build shows that the project will reduce emissions by about 2900 tons per year beyond the reductions

resulting from improved vehicle emission standards. A detailed discussion of the regional emissions analysis can be found in Section 4 of the Air Quality Technical Report.

- 107.37. Has electrification of CalTrain (currently in planning) been factored in?

**Response.** Electrification of CalTrain has not been included in the project definition and is therefore not factored into the air quality analysis. Please refer to Responses 9.1, 14.92, and 107.40 for a discussion of the reasons the CalTrain extension to downtown San Francisco was not included in this DEIR/SDEIS.

- 107.38. Historical Overview - Refers to Peninsula Mass Transit Study which includes extensive data on CalTrain projections. These projections are not represented in this EIR.

**Response.** Section 2.5, Alternatives Selection Process - Historical Overview, pages 2-99 and 2-100 of the DEIR/Technical Appendix, refers to and briefly summarizes the 1985 Peninsula Mass Transit Study which evaluated various systems-level transit alternatives from San Francisco to San Jose.

As described in the Historical Overview, the Peninsula Mass Transit Study evaluated the following alternatives: 1) CalTrain tunnel to Transbay terminal; 2) BART to San Jose; 3) Light Rail Transit (LRT) from San Francisco to San Jose; 4) electrified or diesel CalTrain from San Jose with a tunnel to downtown San Francisco; 5) HOV lanes with express buses from San Francisco to San Jose; 6) BART to the Airport and LRT from the Airport to San Jose; and 7) BART to the Airport and CalTrain tunnel to Transbay Terminal. The study included estimated capital costs and patronages for the above alternatives. Please refer to the Peninsula Mass Transit Study for those patronage estimates.

In addition, the commentor is referred to Response 54.2 for discussion on where the Peninsula Mass Transit Study, as a systems-level study, fits under the Federal Transit Administration's (FTA) Major Capital Investment Planning Process.

- 107.39. Scoping - This section shows the basis for rejecting various alternatives. Each alternative rejected makes use of existing transit facilities, capabilities and land use patterns. The reasons for exclusion are contradictory and arbitrary. The general basis for rejection is that a given alternative is not a BART project. This is completely unacceptable from a regional planning point of view. The rejection criteria is inconsistent and, if applied to any of the BART alternatives, would be grounds for their rejection.

**Response.** The scoping process used by MTC in the AA/DEIS/DEIR to screen alternatives is summarized in the DEIR/Technical Appendix, Section 2.5, Alternatives Screening Process.

At the outset of the AA study, MTC convened two scoping meetings to solicit public comment on the environmental issues and the range of alternatives. Seven other mass transit alternatives, beyond those being forwarded from the Phase 1 study, were proposed by agencies and the public at the Alternatives Analysis scoping meetings. In many cases, these seven other alternatives addressed transit improvements in the Peninsula travel corridor between San Jose and downtown San Francisco that would serve a different travel market than the proposed BART extension from Colma to SFIA. The UMTA had authorized the initiation of an Alternatives Analysis to study BART in the Colma to San Francisco Airport corridor.

A detailed rationale for rejecting these mass transit alternatives is provided in the AA/DEIS/DEIR Conceptual Definitions of Alternatives Report, Task 4, Deliverable, October 5, 1990. The primary reasons for rejecting these seven other mass transit alternatives were lack of cost effectiveness and/or identified funding, and/or the fact that they focused on a different travel market from the Colma-to-Airport corridor approved by the UMTA. The basis for rejection was not that these

alternatives were not BART projects. These seven other mass transit alternatives and ten BART aerial and subway alternatives to the Airport terminals were rejected from further consideration by the Alternatives Analysis Policy Committee on October 5, 1990.

- 107.40. CalTrain upgrade: Excluded due to lack of identified funding. Current BART proposals also lack funding commitments. Excluded because it is outside the Colma corridor. This is an arbitrary corridor choice that benefits all BART proposals but has little to do with regional transit planning.

**Response.** A CalTrain upgrade in the Peninsula corridor, including more frequent service and possible electrification of the line, was evaluated in the 1990, Phase 1 BART-San Francisco Airport Extension/CalTrain Upgrade Pre-Alternatives Analysis/DEIS, during the screening process for the AA/DEIS/DEIR, and in the DEIR/SDEIS screening of alternatives.

In January 1990, the MTC Policy Committee for the Pre-Alternatives Analysis study accepted staff's recommendation to reject the upgraded CalTrain as an alternative for consideration in the formal Alternatives Analysis process. The reasons for rejecting the upgraded CalTrain alternative were 1) funding for these improvements exceeded identified funding for rail extensions; 2) cost-effectiveness indices did not meet UMTA thresholds; and 3) relocation of the downtown San Francisco terminal would be evaluated in the Alternatives Analysis study in the TSM Alternative.

In the Pre-Alternatives Analysis study, MTC's consultant, Parsons Brinckerhoff, estimated that an upgraded, electrified CalTrain would cost \$1,469 million (1990\$) and an upgraded diesel CalTrain system would cost \$1,265 million (1990\$). The CalTrain upgrades included grade separations, support facilities, relocation of the CalTrain terminal in San Francisco to Second and Market Street, a new maintenance yard, rolling stock, and right-of-way acquisition. The electrified CalTrain also included signalization and train control. In MTC staff's opinion, funding for these improvements exceeded identified funding from federal, State, and local sources. This alternative was also rejected from further consideration during the screening process for the AA/DEIS/DEIR and in the DEIR/SDEIS screening of alternatives.

Funding currently committed for the BART extension totals \$498 million, including \$301 million in Section 3 New Starts Funds, \$98 million in State TCI funds, and \$99 million in SamTrans funds. The balance of the \$771 million required for funding the total capital cost of \$1,269 million for the Alternative VI LPA is identified as additional New Starts federal funds and an unfunded local share of \$72 million. Please refer to Chapter 6, Financial Analysis, of the DEIR/Technical Appendix, for more information on financing. In addition, the commentor is referred to Responses 13.2 and 14.93 for additional discussion of funding. Response 54.17 also discusses the Colma to SFIA corridor criteria.

- 107.41. CalTrain to Colma: Excluded for arbitrary BART specific reasons that do not include other current regional transit plans. States that this alternative would require two transfers for BART passengers. Yet upgraded service would allow passengers direct access from San Francisco via CalTrain, eliminating the need to take BART at all. Excluded due to noise and exhaust impacts: assumes that CalTrain will not be electrified, ignores identical or greater impacts of BART system and stations defined elsewhere in this report.

**Response.** A CalTrain branch line to the Colma BART station, which would use the San Bruno branch line to connect CalTrain to BART at Colma, was proposed and evaluated during the scoping process for the AA/DEIS/DEIR study in 1990. During this process, MTC, not BART, evaluated and the Policy Committee rejected this proposal for the following reasons, as described in Chapter 2, page 2-101 of the DEIR/Technical Appendix:

- This alternative would not provide frequent SFIA service or good access to BART for northern San Mateo County riders.
- Service would create two transfers for air travelers coming to the SFIA via BART.

- Residential impacts could be severe due to noise and diesel exhaust.

In addition, the concept of a CalTrain branch line to Colma BART has not been included in any recent CalTrain planning studies and is not advocated by the Peninsula Corridor Joint Powers Board, which is the governing board of CalTrain. This alternative therefore lacks a transit or transportation agency sponsor.

A CalTrain branch line would split CalTrain service, with some trains serving the CalTrain mainline to San Francisco and other trains serving Colma. This would either increase operating and capital costs for the Colma branch line or reduce service on the CalTrain mainline. Thus, splitting CalTrain service would be inefficient.

The Policy Committee partially rejected this alternative from further study due to its severe noise and diesel exhaust impacts on residences. The underlying assumption of the committee was that a CalTrain branch line to Colma BART would be predominately at grade and not electrified. Since CalTrain is now predominately at grade and a diesel service, this was a reasonable assumption. BART and an electrified CalTrain in the same alignment would have similar environmental impacts.

The commentor correctly maintains that an upgraded CalTrain with an extension to downtown San Francisco (a different alternative from a CalTrain branch line to Colma BART) would provide passengers direct access to downtown San Francisco via CalTrain. Please refer to Response 107.40 for a discussion of the reasons that this alternative was not evaluated further.

**107.42.** CalTrain upgrade: Excluded due to lack of funding, cost-effectiveness and focus on different market. Yet a regional approach would show that this is all the same market. The primary airport transit market occurs south of the airport, not in the BART corridor. The primary SF commute market lies along the existing CalTrain line except for those living in the northwest county who are already served by BART.

**Response.** "According to MTC, the Peninsula travel corridor between San Jose and downtown San Francisco...would serve a different travel market than the proposed BART extension from Colma to SFO"<sup>1</sup> The BART extension primarily serves commuters from the northern third of San Mateo County who commute to jobs in downtown San Francisco. While there is some overlap between the BART and CalTrain market in trips between San Bruno and Millbrae and downtown San Francisco, CalTrain also serves downtown San Jose, midpoints along the Peninsula, and Gilroy. Please also refer to Response 72.6 for an additional discussion of the two corridors.

**107.43.** The CalTrain upgrade has been shown to be cost effective in all studies performed and will serve a much larger area than the proposed BART projects.

**Response.** The CalTrain upgrade has not been shown to be cost effective in all studies. A comparison of cost effectiveness was done by MTC in 1990 in the Phase 1 BART San Francisco Airport Extension/CalTrain Upgrade Pre-Alternatives Analysis/DEIS study. Cost effectiveness is a function of projected new transit ridership, travel time savings, and annualized capital and operating costs.

Capital cost estimates were \$1,469 million for an upgraded, electrified CalTrain and \$1,265 million for an upgraded diesel CalTrain. Please refer to Response 107.40 for more details on the upgrades. Capital cost estimates were \$445.7 million for BART External (Station West of Bayshore) and \$763.4 million for BART Internal (Station Beneath Airport Garage).

<sup>1</sup> BART San Francisco Airport Extension, Alternatives Analysis/Draft EIS/DEIR, Conceptual Definitions of Alternatives, Task 4/Deliverable 5, page 2-3, by MTC, October 1990.

The annual operating costs for 156 trains per day were estimated at \$73.7 million for electrified CalTrain service and \$69.4 million for upgraded diesel CalTrain service.

Weekday ridership was estimated by MTC to be 78,300 for upgraded CalTrain and 38,090 to 39,250 for the BART alternatives in the year 2005. MTC estimated that the UMTA cost effectiveness new rider index was greater than \$25 for CalTrain upgrade electrified and between \$20 and \$25 for the CalTrain upgrade-diesel. By comparison, MTC estimated the BART Airport External Alternative UMTA cost effectiveness new rider index between \$10 and \$15 and between \$15 and \$20 for BART Internal. Please refer to Briefing Report, Phase 1 BART Extension to San Francisco Airport/CalTrain Upgrade Alternatives Analysis/DEIS, prepared by the MTC, January 1990, for further information.

The upgrade of CalTrain would improve service in the 50+ mile San Francisco to San Jose/Gilroy corridor. The BART extension would extend BART between 6.1 and 8.0 miles in northern San Mateo County and provide access to the 71.5-mile regional BART system.

- 107.44. Muni-Metro extension via Bayshore: Excluded because it would duplicate CalTrain service. Yet all BART build proposals duplicate CalTrain service.

**Response.** As summarized under the Alternatives Analysis Scoping Process on page 2-101 of the DEIR/Technical Appendix, the Muni Metro extension to SFIA via the Bayshore corridor was not solely rejected by MTC because of potential duplication of CalTrain service north of the SFIA. The following reasons also contributed to this alternative's being rejected:

1. The Bayshore corridor would have served a local travel market other than the BART-San Francisco Airport Extension.
2. Further planning was required to define the project.
3. Further definition of potential funding sources was needed.

In addition, the BART extension north of the City of San Bruno serves a different corridor than the CalTrain corridor. The Alternative VI LPA includes an aerial stub alignment into the Airport. North of San Bruno, the alignment jogs west around San Bruno Mountain, providing service to South San Francisco and Daly City; the Balboa Park, Glen Park, and Mission District areas of San Francisco; and four stations along Market Street in San Francisco. The Alternative VI LPA would provide service to 14 stations between Millbrae Avenue and the Embarcadero Station in downtown San Francisco. CalTrain would serve eight stations with an extension to downtown San Francisco. The CalTrain alignment north of San Bruno essentially parallels Highway 101 and serves less-dense population and employment areas than the Alternative VI LPA alignment. Please refer to Response 13.4 for a discussion of the employment market served by CalTrain and BART stations in downtown San Francisco.

- 107.45. Muni-Metro extension via Junipero Serra: Excluded due to expense and complication. Most complication arises from competition with BART. The expense has not been studied sufficiently to be described as reason for exclusion and it is clear that a surface light-rail system which could use the same route as BART with a much lower impact and infrastructure needs would be less expensive.

**Response.** The Muni Metro Extension of the M-Line from San Francisco State University to SFIA via Junipero Serra Boulevard and I-280 was proposed during scoping for the AA/DEIS/DEIR. MTC staff recommended to the AA/DEIS/DEIR Policy Committee that this alternative be rejected from further study in the AA/DEIS/DEIR for the following reasons:

1. The proposal would be expensive, and federal cost effectiveness is questionable.
2. Capacity, speed, and frequency of service would be limited compared to BART.

3. The impact on the Muni Metro system operations is not defined.
4. The project lacks a sponsor.

For these reasons, the Policy Committee rejected this alternative; it was not rejected because of complications arising from competition with BART. As with all proposals during the AA/DEIS/DEIR scoping process, conceptual cost estimates were not prepared; rather, the engineering consultant, Parsons-Brinckerhoff, used engineering judgment. Although this proposal does not follow any proposed BART alignment, a surface light rail line that used the same route as a subway BART alignment would be less expensive.

107.46. BART termination at I-380: Excluded because it does not get passengers close to the airport. Yet connection to the ALRS at any location near the airport will be an equivalent trip. The airport is a 12 square mile city with many destinations. Most commuters will be airport employees going to maintenance and handling facilities, not to the terminal. Excluded due to the impacts of an end-of-line station. Yet this situation is acceptable for Millbrae under most other alternatives.

**Response.** A BART terminus at an I-380/San Bruno Station, with an ALRS connection to the SFIA, was proposed during scoping for the AA/DEIS/DEIR. This proposal was rejected by the AA/DEIS/DEIR Policy Committee for three reasons: 1) it did not meet the objective of getting passengers and SFIA employees close to the SFIA; 2) there would be end-of-line traffic impacts at the I-380 Station; and 3) CalTrain/BART transfer would be inconvenient.

A BART station at I-380 would be approximately one mile from the United Airlines Maintenance Facility and 2.7 miles to the passenger terminals via the route of an ALRS. This compares with the proposed project Airport external station, which would be 1.3 miles from the terminals and 1.3 miles from the United Airlines Maintenance Facility.

The commentor is correct that the Airport has many destinations. By far the largest rail transit market at the Airport, however, is concentrated at the terminal area. For the proposed project and Base Case Alternative with a BART/CalTrain/ALRS Intermodal Station west of Highway 101, total weekday patronage was projected at 19,100 by MTC for the year 2010. Approximately 14,000 (or 73 percent) of these air passengers, greeters, and airport employees would be bound for the terminal areas. In comparison, MTC projected 5,100 employees would use rail transit to travel to other areas, such as the UAL terminal.

Please refer to Response 54.3 for a discussion of the impacts of an end-of-line BART station at I-380.

107.47. BART tube to Oakland Airport: This is one of the alternatives rejected for sound reasons. Additional Alternatives: Alternative 4B rejected because of the cost of bringing an aerial line into the terminal. Yet Alternative 6 includes significant underground lines below sea level and the cost is not considered prohibitive in that case. This rejection also suggests that bringing the ALRS over to the west side of 101 is an efficient solution yet that solution is rejected elsewhere.

**Response.** The BART tube to Oakland was rejected by the DEIR/SDEIS Steering Committee on March 20, 1994.

Alternative 4B (BART extended to SFO aerial/internal with a station adjacent to the parking structure) was rejected for further study by the Policy Committee in the January 1991 AA/DEIS/DEIR for the following four reasons:

- Passenger convenience was not significantly improved over Alternative 3 - BART to Airport External. (SFIA passengers arriving at an aerial station located west of the Airport garage would have a relatively long walk to get to their boarding gate. Alternatively, these passengers would still need to transfer to the ALRS located beneath the BART platform.)

- The cost of bringing BART aerially to the terminal would be considerably more than bringing the ALRS across the highway to the external BART station.
- Alternative 4B would violate BART criteria requiring a tailtrack for turning trains back at end-line stations. A tailtrack is critical to the smooth operation of train flow and storage, as well as in failure management.
- Significant visual impacts would occur due to the elevated tracks located near San Bruno neighborhoods.

The Alternative VI subway alignment to the proposed Airport International Terminal is considerably more expensive than bringing the ALRS across the highway to the external BART station, but it does not have the three other disadvantages associated with Alternative 4B described above.

Bringing the ALRS west of Highway 101 to connect with BART and CalTrain was not rejected in all cases. This scenario is a component of the proposed project and Alternatives III, IV, and V, and their design options are evaluated in the DEIR/SDEIS.

107.48. [Table 2.5-1 of the DEIR/Technical Appendix]:...lists threshold criteria for alternative evaluation.

**Response.** Yes, Table 2.5-1 of the DEIR/Technical Appendix does list threshold criteria for alternative evaluation, which were based on the project objectives and need to be met for an alternative to be carried forward.

107.49. [Table 2.5-1 of the DEIR/Technical Appendix]: BART/CalTrain Intermodal Connection: This could occur in San Francisco via the planned CalTrain extension. It does not suggest any particular BART alternative.

**Response.** A BART/CalTrain intermodal connection could occur in San Francisco via an extension of CalTrain downtown, as being planned by the Joint Powers Board and MTC. This extension would technically fulfill the criteria. What the criteria do not state is that an intermodal opportunity for CalTrain riders from the south to transfer to BART and access a wide variety of employment, school, and residential sites in the Mission District and at four BART stations along Market Street.

While a CalTrain extension to downtown San Francisco would technically satisfy this criterion, it would require a circuitous route, added travel time, and doubling back from the downtown CalTrain/BART intermodal connection to provide access to many other employment, school, and residential sites along the rest of the BART line in San Francisco.

107.50. [Table 2.5-1 of the DEIR/Technical Appendix]: BART Extension South: This criteria is arbitrary and does not accommodate alternative transit systems or the existing transit system. BART has consistently denied that this project is intended as a stepping stone south. This criteria suggests that BART is moving south without regional support or regional planning and should therefore be excluded as a criteria.

**Response.** The criterion for accommodating a BART extension south does not preclude existing or other alternative transit systems. The BART Board of Directors adopted a BART Extension Staging Policy, revised October 25, 1990, which lays out the parameters for BART extensions. The BART extension to the Airport is a Phase I Inside Current District Extension, pursuant to the BART/SamTrans Agreement, March 1990. BART extensions from Millbrae to Menlo Park and Menlo Park to San Jose are identified as Phase II and III (Outside District) planning priorities. Therefore, no alternative should preclude a BART extension further south.

Any extension south would require preparation of Environmental Impact Statement(s) and Report(s), as required under NEPA and CEQA. Any extension south would require, at a minimum, a major planning process that is coordinated with SamTrans, San Mateo County, affected cities, MTC, the State of California, and possibly the FTA. Any possible future extension south towards San Jose would also be subject to a satisfactory cost-sharing arrangement with San Mateo and Santa Clara counties, subject to BART project approval.

Please refer to Response 244.10 for additional discussion of the criteria to accommodate a future BART extension south.

- 107.51. [Table 2.5-1 of the DEIR/Technical Appendix]: A better criteria would be “2 Minute Headways.” Many systems can deliver that kind of service where appropriate. To include proprietary criteria is inconsistent with sound regional planning.

**Response.** The text should be modified to clarify that sustaining two-minute BART headways during peak periods also applies to other transit providers. The third bullet in Table 2.5-1 on page 2-106 of the DEIR/Technical Appendix is revised as follows:

- Sustains 2-minute BART or other fixed rail transit headways during peak.

- 107.52. [Table 2.5-1 of the DEIR/Technical Appendix]: Satisfies BART/etc. safety criteria. Again this is a non-exclusive criteria with proprietary structure.

**Response.** BART and CalTrain are the major fixed-facility transportation providers in the corridor and, as such, BART or CalTrain alternatives must satisfy design and safety criteria to be practicable. If an alternative is not practicable, it is not feasible. An alternative was found to be infeasible if it would not be likely to be accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

Please refer to Response 24.7 for a discussion of SFIA safety and design criteria.

- 107.53. [Table 2.5-1 of the DEIR/Technical Appendix]: Occurs in SF/SFIA Corridor: The BART build alternatives are typically outside the true corridor. Each one includes a route around San Bruno Mountain which adds several miles to the line as well as time delays and planning complications.

**Response.** All of the BART build alternatives, as well as the CalTrain alignment, are in the San Francisco-to-SFIA corridor, but along different routes. The CalTrain alignment, if extended to downtown San Francisco, is approximately two miles shorter than the proposed project alignment from a common point at Millbrae Avenue. The proposed project does include an alignment into the Airport and goes west around San Bruno Mountain, providing service to South San Francisco; Daly City; the Balboa Park, Glen Park, and Mission District areas of San Francisco; and four stations along Market Street. The proposed project would provide service to 14 stations between Millbrae Avenue and the Embarcadero Station in downtown San Francisco. With an extension to downtown San Francisco, CalTrain would serve eight stations. The CalTrain alignment north of San Bruno essentially parallels Highway 101 and serves less-dense population and employment areas than the proposed project alignment. Please refer to Response 13.4 for additional discussion of connectivity to employment sites in San Francisco.

- 107.54. [Table 2.5-1 of the DEIR/Technical Appendix]: The existing rail transit system occupies the most efficient route between San Francisco and the Airport as well as all points south. It was laid out before any of the cities along the line and they subsequently grew up around it.

**Response.** Please refer to Response 72.6 for a discussion of the CalTrain corridor.

- 107.55. [Table 2.5-1 of the DEIR/Technical Appendix] [f]unding shortages occur for each of the BART proposals. CalTrain alternatives previously rejected often fall within funding limits for this project and include much more extensive service. If CalTrain costs were analyzed strictly for SF/SFIA service, all goals could be met within current funding availability.

**Response.** While funding is a critical determinant of an alternative's feasibility, cost effectiveness must also be considered. Please refer to Response 107.43 for a discussion on cost effectiveness. Please also refer to Response 107.14 for discussion of local responsibility for project costs. See also the discussion of alternatives reviewed on page 2-99 of the DEIR/Technical Appendix for clarification of the review of CalTrain proposals.

- 107.56. Air passenger walking distance is offered as a criteria. Most people who will use transit to get to the airport will be employees seeking destinations spread over a 12 square mile area. These passengers will likely board the ALRS to get to their destinations. This suggests that the routing of the ALRS is critical and that a convenient transfer point to it from regional transit is appropriate. International passengers will be the least likely to use public transportation. Air commuters will be more likely, but these will come from many locations throughout the Peninsula. A functional end of the line station is also mentioned here. It is clear that this is intended to be an automobile destination rather than a passenger destination. This points up the major flaw in BART design: It is designed around existing auto-traffic patterns rather than conceived as a replacement for those patterns.

**Response.** The commentor is referring to the convenience comparative criteria listed in Table 2.5-1, Evaluation of Proposed Alternatives, Screening Criteria, of the DEIR/Technical Appendix. The results of MTC's mode choice model indicated that more than 55 percent of BART riders to SFIA would be air passengers and the remaining percentage would be work trips or other types of trips. For work trips, approximately 40 percent work at terminal locations and the remaining 60 percent work at remote locations on SFIA property. Walking distances from the rail transit terminus to ticketing counters is an important screening criteria. The intermodal connection among BART, CalTrain and the ALRS is also listed as a screening criteria in Table 2.5-1. Access to BART stations by other modes of transit is also an important criterion, but is not restricted to the end-of-the-line station. Another screening criterion is the opportunity for a BART/CalTrain intermodal connection, which is available at the end-of-the-line station under all of the BART build alternatives.

- 107.57. Generally overall MTC modeling for the Peninsula has been ignored as well as actual usage at the Airport. Other studies show that 65 percent of all airport users come from south of the airport. Most of those are airport employees, not passengers.

**Response.** MTC performed the BART patronage forecasts, and estimated patrons' mode of access, i.e., transit, auto, or walking. Table 3.1-1, SFIA Airline Passenger and Employee Origins Percent Distribution, presents the modeling assumptions used for the location of air passengers and employees traveling to the SFIA. This table, on page 3.1-3 in the DEIR/Technical Appendix, indicates that 56.4 percent of SFIA employees live south of the airport, 34.8 percent of resident airline passengers live south of SFIA, and 28.6 percent of non-resident airline passengers travel from south of the airport. MTC's forecasts included estimates of transit patronage to SFIA by work trips, non-work trips, and air passengers. MTC supplemented their forecast with more detailed mode choice modeling on access to SFIA.

- 107.58. BART operations and failure management and BART route accommodation are proprietary criteria that exclude non-BART alternatives.

**Response.** Operations and failure management and the number of BART routes that can be accommodated are comparative criteria that in fact were not used to reject any proposed alternatives in the DEIR/SDEIS screening process. BART operations and failure management criteria were applied to all proposed alternatives equally, whether they were BART or another rail

mode. The text should be modified to clarify that BART operations and failure management was applied to all proposed alternatives, including non-BART alternatives. Page 2-108, first bullet and paragraph one, sentence one, is revised as follows:

- |  |   |
|--|---|
| • BART operations and failure management | Subjective ranking of BART operating and failure management characteristics by BART's Operations Liaison staff. A relative ranking of excellent/fair/poor was used, with explanatory text as appropriate. |
|--|---|

The number of BART routes that can be accommodated is a comparative criterion that was only applied to BART-proposed alternatives in the DEIR/SDEIS screening process. Non-BART alternatives were not rejected because of this comparative criterion, and therefore no change to the criterion is needed.

- 107.59. Most environmental impacts discussed in the EIR are defined as unavoidable. Yet many of the excluded alternatives would have lower environmental impact, particularly in regards to Construction Impact, Resource Usage and Habitat Impact.

**Response.** As indicated in Table S-7, Comparison of Key Impacts, in the Executive Summary, some, not most, of the environmental impacts discussed in the DEIR/SDEIS are significant and unavoidable. In fact, the great majority of significant impacts can be mitigated below a level of significance.

The alternatives that were rejected from further consideration during the DEIR/SDEIS scoping and screening process were rejected because they were found to be infeasible and not likely to be accomplished in a successful manner within a reasonable period of time, considering economic, environmental, legal, social, and technological factors.

- 107.60. Alternatives 7, 8 - Rejected on the basis of "no identified funding.". Yet other alternatives greatly exceeded currently identified funding at time of selection for further study.

**Response.** Alternative VI, BART to Airport Internal Station via I-380 with a BART/CalTrain connection near Tanforan, and Alternative VII, South San Francisco BART alignment with CalTrain relocation (Colma Creek corridor) and BART/CalTrain/Airport Light Rail Internal Station at 7th Avenue in San Bruno, were rejected from further consideration for reasons beyond the fact that they would require a new source of funding which is currently unidentified. As described on page 2-110 of the DEIR/Technical Appendix, these alternatives were also rejected from further study due to these cumulative factors: 1) an intermodal station and/or the alignment were in areas likely to be classified as wetlands with high habitat value for sensitive species, and would not satisfy federal guidelines for a least environmentally damaging practicable (wetlands) alternative; 2) there would be significant visual, traffic, and noise impacts; and 3) these alternatives are neither proposed in any regional transportation plan, nor are they proposed by the Peninsula Corridor Joint Powers Board, the governing board for CalTrain.

- 107.61. Light-Rail to Colma - Excluded because it does not include an intermodal station. In reality, a light-rail line here would integrate with the CalTrain system and would actually serve as an intermodal station. If actual usage patterns are reviewed, this would be an adequate and cost effective means to solve local as well as regional transit problems for a fraction of the cost of the BART proposals.

**Response.** Please refer to Response 54.12 for a discussion of Light Rail Transit (LRT) system from the future Colma BART Station to a Light Rail/CalTrain/Airport Light Rail Station in the vicinity of I-380.

- 107.62. The general result of the criteria structure is that all proposed alternatives must include BART and exclude other modes as a primary feature. Each alternative must follow the proposed BART route or it cannot be considered within the market area or corridor. Each alternative must have completed planning, funding structure and local agreements to be considered (even though the BART proposals are incomplete in these areas).

**Response.** The criteria used in the DEIR/SDEIS screening process did not exclude non-BART modes. The goal of the screening process for the DEIR/SDEIS was to identify a reasonable range of alternatives that could feasibly obtain the objectives of the project and, therefore, should be studied further in the environmental process. An alternative was found to be infeasible if it was unlikely to be accomplished in a successful manner within a reasonable period of time, considering economic, environmental, legal, social, and technological factors. The set of alternatives selected was structured to isolate the differences between options and to highlight the tradeoffs inherent in the selection of a preferred alternative.

Alternatives did not have to be completely planned, with funding identified and local agreements in place, to be considered feasible. Please refer to Response 54.1 for additional discussion of the screening process.

Please refer to Response 54.17 for a discussion of the selection of the Colma to San Francisco Airport corridor as the corridor for study in the DEIR/SDEIS.

- 107.63. The Introduction [to Section 3.1] states that transit primarily affects traffic volumes. No mention of larger planning and growth issues, local growth goals or the general impact of transit in shaping the character of communities as well as their economies is included.

**Response.** The DEIR/SDEIS does not focus on transit's effects on traffic volumes to the exclusion of other considerations. Page 3.2-1 of the DEIR/Technical Appendix explains that some of these other considerations include stimulating land development and economic activity. In fact, the DEIR/Technical Appendix uses the ability to support desired economic objectives as a significance criterion. Those project alternatives or components that hinder the attainment of these objectives are considered to have significant adverse effects.

Acknowledgment that transit investment can influence local land use patterns is further evidenced in the goals and objectives for the project. Specifically, Goal 3 speaks to transit's ability to enhance local and regional development goals.

- 107.64. Airport Travel Demand - The following numbers are presented to describe travel demand to and from the airport: 33,400 employees; 29.9 million passengers [in] 1990; 51.3 million passengers [in] 2006. It is not clear from these numbers how quantities are computed. Conflicts of this nature are evident throughout the report....

**Response.** The travel demand numbers cited by the commentor are from the 1992 SFIA Master Plan EIR, and are provided as background information. Projections of daily volumes of air passengers to the SFIA are provided in Table 2.1, Regional Travel Projections Daily Volumes 1990 and 2010, in the Transportation Technical Report. This technical report explains that SFIA air passenger trips were estimated using the SFIA Master Plan projections. SFIA home-base work trips were derived from the MTC trip tables from the MTC modeling department, and SFIA home-based shopping trips were derived in consultation with MTC staff. The Transportation Technical Report is available for review at the BART offices at 1000 Broadway, Oakland.

- 107.65. Each passenger typically only makes one local trip to or from the airport for each time he is counted as a passenger. 29.9 million passengers will include a large, but undisclosed, number of passengers using hub services. These passengers arrive and depart via airlines without leaving the

airport and are counted as two passengers. These passengers generate no local trips to or from the airport.

**Response.** The analysis of transportation impacts excluded "pass through" air passenger trips, i.e., air passengers who transfer from one terminal gate to another without using ground transportation services.

- 107.66. 33,000 employees actually represent 66,000 trips (2 per work day). That is a potential for 15.8 million trips per year, assuming 240 work days per employee.

**Response.** The commentor is correct that 33,000 employees represent 66,000 trips. It should be noted that this number of *person* trips does not translate to an equivalent number of automobile or *vehicle* trips. Some of these trips are made by transit and some of these trips involve carpooling. The assumptions regarding future changes in auto occupancy used in the MTC model are presented in Table 2.6 of the Transportation Technical Report.

- 107.67. If 30 percent of passengers use hub services that could reduce the number of air passengers generating local trips in 1990 to 20.9 million.

**Response.** Please refer to Response 107.65 for a discussion of passengers using hub services.

- 107.68. Tables [3.1-1, 3.1-2 of the DEIR/Technical Appendix] show proportions of usage between passengers and employees. These proportions are meaningless because they show no comparison between employee and passenger trips per day. One passenger making one trip will count as a single user in this kind of comparison. One employee working 240 days and making 480 trips also counts as one user in this kind of comparison.

**Response.** Table 3.1-1, SFIA Airline Passenger and Employee Origins Percent Distribution, and Table 3.1-2, SFIA Airline Passenger and Employee Access Modes Percent Distribution, purposefully separate air passenger and SFIA employee location and access mode because of their inherent differences. Traffic impacts, for example, are analyzed on the basis of average daily trips, rather than annual trips.

- 107.69. It is not so important to know where users live as to know where the most frequent users live. Given this disparity in the numbers, Table 3.1-2 [of the DEIR/Technical Appendix] shows scheduled transit being used by more employees than passengers. If an employee has a potential load factor of 480 trips per person (compared to 1 trip per person for passengers), employee usage is clearly the most sensible primary target.

**Response.** MTC's travel demand model considered both air passengers and SFIA employees in forecasts of future transit patronage. Please refer to Response 66.239 for a discussion of newer survey data on mode access to SFIA and for the revised version of Table 3.1-2. Scheduled transit was used by 3.3 percent of airline passengers at SFIA, while 3.6 percent of SFIA employees used scheduled transit. Please refer to Response 107.68 for a discussion of differences between one-time trips to SFIA vs. everyday trips by workers.

- 107.70. BART: 24,000 daily trips at DC, 80 percent are San Mateo County residents. Each passenger makes two trips so actual users should be cut in half when examining demographic and source/destination issues. That means: 12,000 passengers daily with 9600 from San Mateo County.

**Response.** The statement referenced by the commentor reads that Daly City has over 24,000 daily boardings and alightings in 1993. This statement in the DEIR/Technical Appendix is accurate and does not contain erroneous assumptions, as indicated in the comment.

The boardings and alightings refers to measured activity at the Daly City Station on page 3.1-5 of the DEIR/Technical Appendix, and does not address demographic or source/destination in this particular context. By dividing this patronage number in half, the commentor is assuming that each rider makes the return trip in the same manner as the initial trip. In general, this assumption is true, but some people may return from their trip by another method such as by bus, carpool, or on BART when the initial trip was on a mode other than BART.

Also the characteristics of the transit project - such as frequency of service, patronage, station access, linkage to larger system - would affect growth as well as the transit route. Therefore all systems would not necessarily stimulate the same level of growth.

- 107.71. CalTrain: 20,800 daily trips, 54 percent destined for SF from San Mateo County. That means: 10,400 passengers, 6240 destined for SF.

**Response.** The statement referenced by the commentor reads that CalTrain daily ridership averages 20,800, with about 59 percent of this ridership destined for the San Francisco terminus station. This statement in the DEIR/Technical Appendix is accurate and does not contain erroneous assumptions, as indicated in the comment. Please also refer to Response 107.70 for additional information on this issue.

- 107.72. SamTrans: 73,800 daily trips, 23,800 on routes serving SF, 38 percent of those destined for SF. That means: 9044 destined for SF. It is not clear whether this includes return trips or single users.

**Response.** The statement referenced by the commentor reads that SamTrans carries approximately 73,800 (September 1993) daily passengers. Of 14 routes serving downtown San Francisco with 23,800 daily passengers, about 38 percent originate in or are destined for San Francisco. This ridership consists of boardings onto transit vehicles. These statements in the DEIR/Technical Appendix are accurate and do not contain erroneous assumptions, as indicated in the comment. Please refer to Response 107.70 for a discussion of boardings.

- 107.73. The report claims 10,200 SamTrans passengers transfer to BART and continue to SF. Yet it also shows that only 9044 passengers are destined for San Francisco. And it shows earlier that only 9600 San Mateo County residents use BART. These numbers also exclude reference to those passengers who arrive at BART by car.

**Response.** As indicated by the commentor, the report states that 10,200 SamTrans passengers transfer to BART at the existing Daly City Station when the correct statement should indicate that 10,200 passengers transfer between SamTrans and BART at Daly City. The original statement gave the incorrect impression that the number referred to transfers in one direction, while the number (of transfers) actually refers to movement of passengers in both directions, from SamTrans to BART as well as from BART to SamTrans.

- 107.74. Muni: No numbers [are] shown for actual CalTrain/Muni interaction.

**Response.** Table 3.1-3, Muni Routes Serving San Francisco CalTrain Terminus, in the DEIR/Technical Appendix, provides ridership information on MUNI. The table, which is on page 3.1-10 of the DEIR/Technical Appendix, has subtotals for MUNI routes with connections to CalTrain. Transfers between MUNI and CalTrain would decrease with the BART-San Francisco Airport Extension because passengers would transfer from CalTrain to BART at the BART/CalTrain intermodal station, which varies among the BART build alternatives; these riders would no longer transfer to MUNI at the 4th and Townsend CalTrain Station. Some of these new BART riders would still transfer to MUNI along the Market Street corridor, though many would be able to walk to their destination from a BART station. This change is considered a beneficial effect because service could be reduced on subsidized MUNI routes of 80X, 81X, and 82X (CalTrain express shuttles serving 4th and Townsend Station) and crowding would be lessened on

regular MUNI routes, such as Route 15. MUNI/CalTrain transfers under the TSM Alternative would increase without the BART-San Francisco Airport Extension and with the increase in CalTrain service to 86 trains per day.

- 107.75. Table 3.1-14 [of the DEIR/Technical Appendix]...shows daily transit boardings currently and projected to 2010. If these numbers are plotted, the growth under the No-Build and TSM alternatives begins to close on the [1992] LPA growth. In other words these alternatives show usage numbers that get closer to proposed project numbers as the years go by. This curve suggests that transit usage under TSM or No-build will eventually match that of the build alternatives without spending the \$1.2 billion. Curves of this nature also suggest that some of the proponents numbers were front-loaded heavily to make the project look feasible. It is only natural that these numbers would fall off later to bring the curve back to reality. The difference between LPA and No-Build in 1993 numbers is 85,000 daily riders. By 2010 that difference is only 29,000 daily riders.

**Response.** Table 3.1-4, Regional Transit Boardings Daily Volumes, on page 3.1-14 in the DEIR/Technical Appendix, contains a footnote that states "1993 No Build does not include BART to Colma." The Colma Station was included in the other alternatives in 1993. Transit patronage numbers were not "front loaded" to make the project look feasible. The difference between BART patronage under the 1993 No Build Alternative and the BART build alternatives cannot be compared with the same difference in analysis years 1998 or 2010 because of the skewing resulting from the Colma Station exclusion from the No Build Alternative in 1993. According to Table 3.1-14, Proposed Project Regional Transit Person Trips, in the DEIR/Technical Appendix, the difference between the proposed project and the No Build Alternative in 1993 is 60,500 and this difference in 2010 is 22,200, rather than the 85,000 and 29,000 numbers stated in the comment.

- 107.76. Table 3.1-15 [of the DEIR/Technical Appendix]...shows daily transit boardings. These numbers should also be cut in half if actual users are being counted. It should also be noted that Muni and SamTrans can have more than 2 trips per day generated by a single user. Many people use Muni several times a day. Similarly, transfers can count as multiple trips when actually representing only one user and one trip.

**Response.** Table 3.1-5, Regional Daily Transit Operator Boardings, in the DEIR/Technical Appendix, defines boardings as the total number of patrons entering transit vehicles for all sources. To exclude the impact of transfers between transit systems on the number of transit person trips made, separate tables with this information are included. Table 3.1-3, Regional Transit Person Trips (Linked Trips) Daily Volumes by Trip Purpose and Year, in the Summary DEIR/SDEIS, provides information on the change in transit trips that excludes transfers made between transit systems in a single person trip. Transit systems generally review information on boardings without distinguishing the number of times per day a single person boards a transit vehicle.

- 107.77. Mode Choice - This section defines the single largest trip generator as SFIA. It is well documented that most airport employees come from locations south of the airport. Airline passengers come from both directions and probably represent a lower trip impact than employees.

**Response.** Please refer to Response 107.57 for a discussion of air passenger and SFIA residential locations.

- 107.78. This section also states that BART alternatives will improve overall transit utilization. This is based on MTC modeling numbers that include a BART scenario. Yet the growth numbers in [Table] 3.1-5 [of the DEIR/Technical Appendix] show increases in utilization under TSM and no-build alternatives as well. This suggests that transit growth will grow significantly no matter what system is developed. Nothing in the numbers actually points to BART as the cause of this growth. In fact the numbers regarding transfers between mode (Table 3.1-7) are based entirely on

assumptions that cannot be tested and that do not include any full-build alternatives for ultimate systems (i.e. CalTrain/SF extension.)

**Response.** The growth in transit boardings under the No Build Alternative between 1993 and 1998 is partially due to the inclusion of the Colma Station in the 1998 scenario, but not in the 1993 scenario. Transit boardings under the No Build Alternative and all other alternatives increase between 1993 and 1998, partially owing to the growth in total person trips based on changes in population and employment as forecast by ABAG. The increase in total trips also results in increases in total transit person trips. The number of transfers listed in Table 3.1-7, Daily Intermodal Transfers between Rail Services, of the DEIR/Technical Appendix, are based on assumptions provided by MTC. The three transit systems listed in the table—BART, CalTrain, and the proposed ALRS—have direct connections, meeting a major objective of the BART extension.

- 107.79. There is no evidence anywhere in the report to substantiate claims that most CalTrain riders will get off the train and get on a BART train to complete their trip to San Francisco. It is equally absurd that a CalTrain passenger will get off the train and board a BART train for a one-station trip into the airport unless forced to do so by poor transit planning.

**Response.** Transfers between BART and CalTrain are based on MTC's mode choice model. Please refer to Response 66.111 for a discussion of the forecasts of CalTrain riders destined for the SFIA who transfer to BART. The number of CalTrain riders with downtown San Francisco destinations who transfer to BART is based on predictions of the MTC travel demand model. In this model, most CalTrain riders would have a faster trip to San Francisco on BART because the downtown BART stations are much closer to more work destinations than the CalTrain terminus at Fourth and Townsend Streets, which requires a transfer to another transit system in order to arrive at a majority of downtown work destinations.

- 107.80. Table 3.1-6 [of the DEIR/Technical Appendix]...shows transit utilization by geographic area. It assumes that BART alternatives are operational in the baseline year but does not clearly note adjustments or basis for numbers. This table clearly shows that the advantage offered by BART over TSM is not significant when compared to the cost. These numbers also exclude the CalTrain/SF extension which would greatly increase ridership on the existing system so that utilization for TSM would be comparable to that of BART. This is net gain in new trips by LPA over TSM, not substantial when measured against cost: \$1,200,000,000 for 10,000 riders works out to \$120,000 per rider.

**Response.** Table 3.1-6, Transit Utilization by Geographic Area, in the DEIR/Technical Appendix, contains footnote 2 that states “Analysis of 1993 Build Alternative assumes the project is implemented in the baseline year (even though the actual opening year is 1998) and is provided as a means of measuring impacts due solely to the project without influences from general growth or other changes.” The provision of transit services were held constant across the three analysis years for any one alternative. The MTC travel demand model forecasted patronage estimates for the years 1990 and 2010, and the results for 1993 and 1998 were interpolated from these two years. Explanation in greater detail is provided in the Transportation Technical Report on pages 16 to 18.

Please refer to Response 11.6 for a discussion of the CalTrain downtown extension and the transit impacts related to the BART extension. Please refer to Response 54.4 for a discussion of the number of linked trips with and without the CalTrain downtown extension under the TSM and Base Case Alternatives.

- 107.81. Per 3.1-7 [of the DEIR/Technical Appendix], LPA will generate nearly 50 percent of CalTrain ridership. How? Per 3.1-8 only 3600 people will take CalTrain to SFIA. This assumes that people will get off CalTrain to take BART to SF or get off BART to take CalTrain down the peninsula, but very few people will take CalTrain north to the airport?

**Response.** The 19,100 transfers between BART and CalTrain under the 1992 LPA in analysis year 2010 represent movements in both directions, i.e., from CalTrain to BART as well as from BART to CalTrain. The forecasted ridership on CalTrain in 2010 under the 1992 LPA is 46,100, of which approximately 20 percent involve transfers with the BART system. The 3,600 CalTrain patrons riding to or from SFIA in 1993 under the 1992 LPA are the forecast results of MTC's mode choice model. MTC's model forecasts that 5,500 CalTrain patrons would go to or come from SFIA in 2010.

- 107.82. Note BART usage Table 3.1-9 [of the DEIR/Technical Appendix]. No Build consistently excludes Colma while all build alternatives include it. Yet Colma is a reality for the no build alternative and will affect it. Includes continuing assumption that CalTrain riders will transfer to BART. See page 3.1-21

**Response.** The Colma Station is not included in analysis year 1993 because the station will not be opened until 1996. The Colma Station is included in all other alternatives analyzed in analysis year 1993 to maintain the consistency of assumptions for these alternatives. The Colma Station is included under the No Build Alternative in analysis years 1998 and 2010. Where the discrepancy of the exclusion of the Colma Station in 1993 is important to understand the patronage tables it is footnoted, as in Table 3.1-5, Regional Daily Transit Operator Boardings, of the DEIR/Technical Appendix which states in footnote 2, "1993 No Build does not include BART to Colma." This footnote is not included in Table 3.1-9, BART Daily Patronage by Station, in the DEIR/Technical Appendix, because the numbers are readily apparent in the table, which includes patronage at the Colma Station.

- 107.83. Table 3.1-10 [of the DEIR/Technical Appendix]...shows service characteristics. BART numbers reflect the overall system and therefore offer little comparative value with CalTrain.

**Response.** The increase from the No Build Alternative column in Table 3.1-10, Proposed Project Transit Operator Service Characteristics, of the DEIR/Technical Appendix, is intended to provide information on service changes strictly due to the BART extension. This table includes service changes on CalTrain, including the difference from the No Build Alternative for the years 1998 and 2010, when the service levels would be identical.

- 107.84. Table 3.1-11 [of the DEIR/Technical Appendix]...shows travel times for various modes under the LPA. The travel times do not include the downtown CalTrain extension but include walking time for balance of trips. Downtown extension would decrease CalTrain times significantly. A wider range of destinations should also be included. Each of these destinations is favorable to the BART position but does not represent the full range of travel needs in the subject area.

**Response.** The 49 origin and destination pairs included are representative of the multitude of destinations inside and outside San Mateo County that are accessible by mass transit.

Please refer to Response 66.178 for a discussion on the method for estimating travel time that includes various transit options at the origin end of the trip. Transit travel times with and without the presence of the CalTrain downtown extension were provided in the AA/DEIS/DEIR in tables 4.2, Transit Travel Times Northbound, and 4.3, Transit Travel Times Southbound. Travel time under the Base Case Alternative would be the same with or without the CalTrain downtown extension for 37 of the 49 origin/destination pairs. The CalTrain downtown extension provides travel time savings compared to travel without this extension in the remaining 12 origin/destination pairs, with the greatest time savings being 16 minutes between the Montgomery BART Station and the Hillsdale Shopping Center. The second-largest time savings is seven minutes saved between South San Francisco CalTrain Station and San Francisco Civic Center, and also between South San Francisco CalTrain Station and the Oakland City Center. Please also refer to Response 11.6 for a discussion of the proposed CalTrain downtown extension.

107.85. Table 3.1-15 [of the DEIR/Technical Appendix]...shows daily trips by mode. Again the focus on passengers is suspect based on the wide range of usage patterns by airline passengers. Huge variations in type of trip, luggage, arrival and departure procedures and destination effects will make the passenger usage less predictable than this. Passengers must be categorized by type of trip and frequency of trip. The numbers in this table are extrapolations of overall usage numbers at the airport but do not reflect careful investigation into the actual usage patterns that will occur.

**Response.** The forecast numbers presented in Proposed Project Daily Trips by Mode to the San Francisco International Airport, Table 3.1-15 of the DEIR/Technical Appendix, are not simply extrapolations of overall usage at the airport, but reflect extensive analysis by MTC and other consultants. This analysis included a micro-model of mode choice to the airport that was contracted by MTC with airport modeling specialists under the AA/DEIS/DEIR to consider travel-time issues such as walking time from the parking garage to airline ticket counters and walking time from bus stops to ticket counters.

107.86. This [traffic impact] analysis suggests a traffic disaster for Millbrae. This is the result of creating a major traffic attractor rather than supporting the existing, integrated transit system.

**Response.** The comment references page 3.1-107 of the DEIR/Technical Appendix, which discusses significant traffic impacts in 1993 on Highway 101 between the SFIA and Millbrae Avenue interchanges under Alternatives IV and V, and between Millbrae Avenue and Broadway interchanges under all BART build alternatives. Contrary to the implications of the comment, the maximum increase in vehicles on Highway 101 from the no build to build scenarios would be 800 vehicles for the SFIA-to-Millbrae Avenue segment and 500 vehicles for the Millbrae-Avenue-to-Broadway segment during both the A.M. peak hour in the northbound direction. The only other significant traffic impact in Millbrae would be at the intersection of El Camino Real/Millbrae in 1998 and 2010 under Alternative VI.

Please refer to Response 6.6 for further discussion of traffic impacts and possible improvements to the intersection of El Camino Real and Millbrae Avenue. Please refer to Response 10.15 for a discussion of the improvements planned to the intersection of Millbrae Avenue and Rollins Road. Please refer to Response 10.17 for a discussion of impacts to the Millbrae Avenue Interchange of Highway 101 under the Alternative VI LPA and the Aerial Design Option LPA.

107.87. Ridership and traffic impacts should be reviewed for Daly City, Fremont, Concord, Richmond as well as CalTrain/San Jose and /San Francisco. The BART stations each have a history of traffic problems that will clearly demonstrate the differences between the two systems.

**Response.** The stations listed in this comment were designed before the use of modern environmental planning techniques. In contrast, the FTA-approved MTC travel demand model was used to analyze ridership and traffic impacts associated with the end-of-line stations for the alternatives included in the DEIR/SDEIS. Please also refer to Response 14.36 for a discussion of traffic issues at end-of-line BART stations.

107.88. The BART alternatives will eliminate CalTrain parking in San Bruno.

**Response.** None of the alternatives would reduce the number of CalTrain parking spaces in San Bruno. The CalTrain station in San Bruno would not be changed from the current location under the proposed project, nor under Alternatives II, III and VI. The San Bruno CalTrain Station could be relocated under Alternatives IV and V. This station would be required to be moved under Design Options V-A and V-B. For all Alternatives that require such a move, parking spaces at the San Bruno CalTrain Station would be replaced for CalTrain patrons at the new location.

107.89. Background traffic refers to the traffic and activity resulting from growth around a BART station. As evidenced throughout the Bay Area this growth can be significant and unpredictable. It is

often inconsistent with local plans and generates its own set of adverse impacts. It is not appropriate to ignore those issues in this report.

**Response.** The growth in background traffic was incorporated into the analysis of traffic and parking impacts. As stated in the DEIR/Technical Appendix under Cumulative Analysis on page 3.1-99, "The change in population and employment not related to the project is considered 'background growth.' Impacts from background growth are derived by comparing the No Build Alternative in 1998 to existing conditions in 1993 and the No Build Alternative in 2010 to 1998." Extensive efforts will be taken to prevent spillover parking into the surrounding communities, and BART staff will continue to work with representatives of local towns and cities to prevent local impacts from BART parking. Mitigation Measures 2.1, Residential Permit Parking, 3.1, Physical Barriers and Comfort Standards, 6.1, Parking Restrictions, and 6.2, Pricing Surcharge and Other Administrative Mechanisms, are measures to be taken to eliminate spillover parking under the proposed project and for all other BART build alternatives.

- 107.90. BART is well known as a stimulus to local economies....The communities on the peninsula are relatively stable with long histories of community and business patterns. Those patterns are closely related to the existing rail system. A significant change in those patterns will constitute a grave impact that no amount of mitigation can offset.

**Response.** Relatively stable communities are not static, and many recent changes, such as the amount of hotel development in Burlingame and Millbrae east of Highway 101 or the intensification of land use in South San Francisco's East of Highway 101 area, are not closely related to the existing rail service. The communities are anticipating potential long-term impacts on land use. Station-related land use changes could be beneficial from a transportation and air quality perspective relative to alternative land use development patterns that would occur if BART is not built in the corridor.

- 107.91. [LPA Parking Analysis of the DEIR/Technical Appendix:] Overall parking shortages: This points up [the] need to design transit to go where the passengers are, rather than to simply create collector parking for passengers who already drive.

**Response.** Please refer to Response 52.4 for a discussion of the determination of the appropriate supply of parking. Rail transit, is by its very nature, centralized to an alignment with modes that are served by stations. These stations depend on feeder service from other transit services as well as from other roadway and pedestrian/bicycle networks.

- 107.92. [LPA Parking Analysis of the DEIR/Technical Appendix:] [The] proposed project will decrease demand at Daly City by transferring that demand to other locations. This will not get people out of cars, it will just spread the cars around. All BART passengers south of Millbrae will drive while CalTrain passengers can board in places closer to homes/work.

**Response.** BART patrons who drive to the Daly City BART Station would have the option of driving to Colma when that station opens, or to BART extension stations if this project is implemented. Individuals who currently drive to the Daly City BART Station may change their mode of access to transit or walking because the BART station is closer to origin. A significant number of BART patrons from south of Millbrae would access BART by transit, especially from CalTrain.

- 107.93. [LPA Parking Analysis:] The report should include information on other stations and systems re: usage and parking quantities: Sacramento, Portland, San Diego, San Jose.

**Response.** The numbers of parking spaces required to meet the forecasted parking demand at every BART-SFIA station studied in the DEIR/SDEIS were derived from the federally approved MTC travel demand model, and refined by employing a sub-area traffic model of central and

northern San Mateo County developed for this study. This sub-area traffic model used MTC regional BART patronage projections to derive the number of persons driving to each existing and future BART station. The parking demand and supply in other cities reflect specific situations in those areas and would not be applicable to the BART-San Francisco Airport Extension project.

- 107.94. [LPA Parking Analysis of the DEIR/Technical Appendix:] \$1.2 billion to solve BART parking problem, a problem that was, and continues to be, designed into the system.

**Response.** Parking supply at BART stations is designed to accommodate the anticipated parking demand in the year 2010 as determined by modeling. The model uses MTC regional BART patronage projections to derive the number of persons driving to each existing and future BART station. The parking demand will be highest in 2010, compared to 1998 and 2000, and therefore the impact analysis and required mitigation measures were based on 2010 projections, i.e., when the adverse effects from parking demand would be greatest. The intent of the BART extension is to provide improved transit service to northern San Mateo County and to fulfill the other goals listed in Table 1-2, Goals and Objectives, in the Summary DEIR/SDEIS.

- 107.95. Section 1.5...suggests that parking permits could offer a solution to newly created parking problems. This degrades the quality of life in all affected neighborhoods. It is not a solution.

**Response.** BART and SamTrans will provide sufficient off-street parking and feeder bus service to meet the MTC projected passenger access demand in the year 2010 at all new stations. Spillover parking and a residential parking program are not projected to be needed. Please refer to Responses 14.25 and 14.38 for a discussion of monitoring and mitigation of spillover parking into local streets.

- 107.96. Again, additional details should be examined: How do passengers use suburban stations to get to the airport: How many are drop off only, requiring no long-term parking. Airport usage by passengers will be enhanced by utilizing stations in a wider range of locations (like CalTrain).

**Response.** Air passengers will not be allowed to park at the BART extension stations. Please refer to Response 10.10 for further details on air passenger parking at the BART extension stations. Parking at other BART stations or other transit systems' parking facilities must obey the regulations at those stations. For example, BART restricts parking at all stations to 72 hours except those stations with validated parking which restricts parking to 24 hours.

- 107.97. The BART extension is inconsistent with the local plan for each city affected. These plans were prepared by State and Federal mandates in order to forestall traffic problems as well as other land use impacts. Now a Federally supported project is being proposed that will defeat the intent of those plans.

**Response.** The BART extension is not inconsistent with the local general plans. The project has received support from the communities in the project corridor, including the Town of Colma and the cities of South San Francisco, San Bruno, and Millbrae.

- 107.98. BART makes no accommodation for bikeways, yet these are recognized as an important and cost effective way to offer minor reductions in traffic as well as making transit accessible without use of the auto.

**Response.** BART has worked with communities in support of their efforts to construct bikeways. In general, where BART extensions would be in subway or in aerial alignment, BART has worked with communities that wish to build bikeways within BART's right-of-way. Where the extension is in retained cut or at-grade alignment, however, the opportunities for a bikeway are more constrained due to limited available right-of-way. Please refer to Response 146.1 for additional

information on efforts for bike path development for this project and Volume I of the FEIR/FEIS for a conceptual proposed bike route utilizing BART right-of-way.

- 107.99. BART makes no attempt to create a system that integrates with local patterns so that pedestrian use is enhanced or developed. The new Colma station is surrounded by a sea of parking and concrete so that any use by local pedestrians is difficult and unfriendly. Even if nearby residential development occurs, pedestrian use will always compete with the automobile.

**Response.** BART station plans are designed to encourage pedestrian access. The location of stations in relation to major arterial roadways is constrained by concerns for significant environmental impacts. Improving pedestrian access by locating stations and the track alignment closer to El Camino Real in South San Francisco, San Bruno, or Millbrae would cause additional significant impacts in those communities. BART and SamTrans staff have coordinated with official representatives of these communities on the location and design of BART stations and will continue to do so to determine the final station designs.

- 107.100. Everything about the existing stations and the proposed stations favor access by the car. The existing CalTrain system has stations located on or near the main streets of nearly every community on the peninsula. These are more readily accessible to pedestrians, bicycles, the disabled than most BART stations. They also allow for a two-way commute due to their location close to local business centers.

**Response.** The number of parking spaces at BART stations was determined by the MTC mode choice model in conjunction with additional subarea traffic modeling. The traffic and parking methodology for determining these numbers is described in Section 2.0, Traffic, Transit, and Parking Projections Methodology, in the Transportation Technical Report. Please refer to Response 107.99 for a discussion of placement of BART stations in relation to pedestrian access.

- 107.101. Table 3.1-105 [of the DEIR/Technical Appendix]...shows comparative pedestrian access for each alternative. These numbers are extremely low and do not reflect the goals of modern transit planning.

**Response.** MTC's mode choice model was used to determine the number of pedestrians accessing the station, as indicated in Table 3.1-105, Peak Hour Pedestrian Entries and Exits - 2010, of the DEIR/Technical Appendix. A stated goal of the project is to promote alternatives to single-occupancy automobiles, including walking to BART stations.

- 107.102. Nothing about station location or planning encourages or supports primary pedestrian access. Stations are designed as one-way stations: taking commuters away from home to work. Stations are not designed as focal points of a community which may become an employment attractor at some point. In effect these stations support the status quo of long commutes away from peninsula communities.

**Response.** Future residential or employment development in the immediate vicinity of BART has been a consideration, although specific development projects are not part of the BART extension project and would be planned separately. For example, two parcels of private property abutting the Hickey station have potential for commercial development under a separate project. A BART station may be located adjacent to a major shopping center in San Bruno, or alternatively, may be located in downtown San Bruno.

- 107.103. CalTrain supports pedestrian use at most stations and most stations function as rider sources as well as commute destinations.

**Response.** Existing BART stations serve both ends of the commute trip, i.e., trips to and from work. The stations along the BART extension will also serve both trip ends. For example, the

location of the Millbrae Avenue Station has been determined through consultation with the City of Millbrae. Its location will better serve the downtown area than the current Millbrae CalTrain Station by improving access to El Camino Real and creating joint development opportunities in close proximity to the station. Please refer to Responses 107.99 through 107.102 for further discussion of these issues.

- 107.104. Freight use is eliminated on the San Bruno Branch. This will preclude any future freight use along this route, putting more trucks on the road with increased neighborhood impact. Many planners dealing with long term issues include future rail freight growth as a likely possibility as communities become more stable and fuel resources shrink.

**Response.** SPTCo has already abandoned freight service on the San Bruno rail line.

- 107.105. The report suggests that San Mateo County has shown slower growth than most other Bay Area counties. The implication is that this is related to transit availability rather than quality of life or availability [of] developable area.

**Response.** Recent San Mateo County growth rates are documented by census data. Availability of developable area, cost of land, and cost of housing have been important factors in recent development trends. Residential, commercial, and industrial developers have found parcels in other counties more attractive to build on. Mobility and transit access are only two factors.

- 107.106. Earlier comments suggest that the county includes mostly residential or open space. This is a skewed figure because of the coastal areas and the wildlife refuge.

**Response.** The proportion of the County devoted to different land uses is based on the total acreage for the County. This representation of the County's land use pattern is accurate and not intended to skew the public's perceptions of the extent of developed space in the County. The characterization is particularly appropriate since it appears under the heading "Regional Summary," where the DEIR/Technical Appendix is merely describing the larger region within which the project corridor is situated. A review of the description of land uses within the project corridor, beginning on page 3.2-7 of the DEIR/Technical Appendix, reveals these land uses to be overwhelmingly urban.

- 107.107. If the county was studied in terms of service area, its uses and demographics would be more clearly consistent with its character and would indicate a more diverse usage. It would become apparent that the county has more typical ratios of employment/residential uses and in fact has substantial diversity. Physically, the county has greater opportunity for close-to-home employment than most areas in the region. Each city on the peninsula has a substantial employment base along the 101 corridor as well as extensive residential resources along the existing transit corridor and in the hills above. This kind of analysis would suggest a more complete (CalTrain) urban rail system rather than a single destination system such as BART.

**Response.** San Mateo County does have opportunities for "close-to-home employment," but travel patterns indicate many residents work in San Francisco and Santa Clara Counties, while San Mateo employees reside locally, in the surrounding counties, and in the East Bay. While CalTrain offers more complete access to the south, BART provides more complete connections to San Francisco and the East Bay, as well as faster and more frequent service over longer hours.

- 107.108. Table 3.2-1 [of the DEIR/Technical Appendix] BART ridership represents 20 percent of all employed San Mateo County residents who commute out of the county. This is improbable since half of those residents commute southward and the northward commute rate has been flat for ten years.

**Response.** Table 3.2-1 of the DEIR/Technical Appendix shows the percentage of employed people in each of the five communities who rely on public transportation. It is assumed that the comment is based on a comparison of out-commute patterns from San Mateo County with forecasts of BART trips to or from the County. Many BART trips represent non-commute trips, including trips to the Airport, shopping trips, family visits, etc. While a significant proportion of BART trips are work trips, this proportion is lower on BART compared to other systems such as CalTrain, because BART has good midday, evening, and weekend service.

- 107.109. Table 3.2-2 [of the DEIR/Technical Appendix]...shows employment trends and projections for the county. This information is relatively incomplete because it cannot be meshed with actual commute destinations. The EIR assumes most commuters go to San Francisco....There is no clear, simple pattern at this part of the peninsula. The result is a commute that goes in many directions within the area as well as to the outside.

**Response.** The purpose of presenting Table 3.2-2 of the DEIR/Technical Appendix may have been misinterpreted by the commentor. The table presents the growth forecasts by ABAG for the communities that comprise the project corridor, and should be used to understand the magnitude of growth predicted over the next 20 or so years. Its inclusion has nothing to do with explaining commute patterns in the Bay Area, and certainly should not be construed to suggest that all commuters go to San Francisco. Commute patterns have evolved significantly and there are many more job destinations, including San Mateo County, than existed 20 years ago. Travel patterns within the region, and used by the DEIR/Technical Appendix, are based on MTC's modeling process and "trip tables."

- 107.110. Colma Specific Plan Reference: failure to meet two goals stated: BART and the surrounding station will not compliment adjacent uses and character.

**Response.** As discussed on page 3.2-35 of the DEIR/Technical Appendix, State law exempts BART from compliance with local plans and policies. Accordingly, designations of significance under CEQA are not made with respect to a project alternative's consistency with local general plans, and mitigation is not suggested if a project alternative is inconsistent with local policies. BART nevertheless wishes to disclose to the public and to local jurisdictions the extent to which the BART—San Francisco Airport Extension is consistent with adopted local general plans and land use goals.

The BART extension through the Town of Colma does not involve a station, and the alignment is proposed to be subway. Accordingly, the proposed project should not have an effect on the character and uses of the Town or its subareas. The commentor may be directing his comments towards the Colma Station, which is not a part of the BART—San Francisco Airport Extension.

- 107.111. The Colma Specific Plan states specific goals for cemetery protection. All concerns for cemetery protection have been generally ignored.

**Response.** The alignment would be placed in cut-and-cover configuration to protect the visual setting and quiet associated with the cemeteries. After the disruption during construction, the BART extension would not impact the area.

- 107.112. If an area is as sensitive as these, alternate routes for a transportation system should be considered. Sensitive habitats often point to the fact that this is not an appropriate place for massive infrastructure growth. The fact that this is one of the least populated areas of the peninsula should suggest that a major transit line is appropriate elsewhere, perhaps where intense usage is already underway and can be supported (the existing rail transit corridor.)

**Response.** The preferred choice for a transit route would normally traverse areas of relatively high density. However, the selection of this corridor for investigation is an outgrowth of more

than 20 years of transportation studies (please refer to Section 2.5 of the DEIR/Technical Appendix). Given that these studies have resulted in the current project corridor, the objective at hand is to identify a route that most efficiently and effectively connects the Colma Station now under construction with a station in the vicinity of the SFIA. The DEIR/Technical Appendix provides several options for consideration, although all require the alignment to traverse through Colma, since there are no other routes that would connect the Colma Station with desired destinations to the south.

- 107.113. To suggest that mitigation measures can always alleviate potential problems is not only absurd but a backwards approach to design and planning.

**Response.** Mitigation measures are not intended to replace good design and planning. The latter processes are essential to arrive at a preferred project. Once the project has been defined, the purpose of mitigation measures is to further refine the project to minimize or avoid significant adverse environmental impacts. If the design and planning processes have been properly conducted, many of the potential problems would already be alleviated.

- 107.114. The SSF plan encourages a consolidated transportation center at the 101 corridor. It states "no station shall be located within the community." SSF currently has a CalTrain station at the 101 corridor, near its downtown, near a major employment center which will grow substantially over the next decade. BART will not serve any of these locations.

**Response.** The statement is correct. However, the El Camino Corridor Redevelopment Plan and General Plan Amendment (GP-93-47) are more recent South San Francisco planning documents, and appear to indicate a modification of the city policy regarding a BART station.

- 107.115. Again the planning fails to recognize cities as destinations rather than bedrooms. This time it is the city of SSF that fails. This policy will also ensure that CalTrain remains a more urban transit option with a stronger relationship to downtown SSF.

**Response.** Please refer to Response 107.114.

- 107.116. Here the report states that substantial redevelopment and intensification has occurred in the Gateway area of South San Francisco, east of the 101 corridor. This area attracts large numbers of employees and yet is as far away from BART as you can get in SSF. CalTrain is the only system that serves this area as a rail commute option.

**Response.** The statement about the Gateway area is correct. However, access to most of the jobs in this area from CalTrain still requires feeder transit, and the land use pattern of Gateway, including wide streets and free parking, is not particularly supportive of the transit mode option. Please refer to Response 107.120 for further discussion of the Gateway area.

- 107.117. Fig 3.2-4 [of the DEIR/Technical Appendix]...shows the proposed route through South San Francisco. The map shows that the route serves the lowest density portions of SSF. Typically transit planning focuses on highest density areas as logical service needs.

**Response.** It is not possible to develop a BART right-of-way that links the existing Daly City/Colma area to San Francisco International Airport via the existing high-density areas of South San Francisco without causing substantial community disruption. The proposed route attempts to serve the greatest number of people while following the underutilized SPTCo right-of-way.

- 107.118. Historical transit planning in under utilized areas has been for the sole purpose of stimulating growth and supporting speculation. Is it appropriate to spend \$1.2 billion to encourage speculation?

**Response.** Rail right-of-way is often located in existing rail or utility rights-of-way to make acquisition easier and less expensive. The planning area for the BART extension project is not underutilized, but in fact is fully built-out. The purpose of the project is not to stimulate growth but to address existing development and planned growth, such as the expansion of the SFIA.

- 107.119. The realities of the neighborhood, however do not warrant the scale of transit availability proposed here. There is a relatively small quantity of these uses compared to other parts of the city. The language fails to describe the limited area being discussed as compared with other areas that have a greater transit need.

**Response.** Workers and travelers at San Francisco International Airport represent the single greatest potential generator of transit trips in the corridor. Please refer to Response 107.20 for a discussion of the Gateway employment area.

- 107.120. Report states that South San Francisco has a large amount of in-commuting, yet this proposal does nothing to service people commuting toward the major employment centers of SSF, which are located east of 101 in the Gateway area.

**Response.** The majority of workers commuting to the Gateway area do not live in areas that are or will be served by BART. Many workers live in Daly City, elsewhere on the Peninsula, or in the East Bay. BART and a shuttle bus may better serve some of these trips. However, given the character of the Gateway area, buses, vans, and carpools may be more effective ways of connecting residential areas with the Gateway employment area.

- 107.121. The report suggests a high number of minority, elderly households. Again, this proposal does little to serve the actual commute needs of these people. Most of those households are located nearer the city center and away from the station location being proposed.

**Response.** Elderly households do not have significant commute needs, but they do have travel needs that are served by transit, including BART and SamTrans. Minority and/or low-income households often exhibit greater transit dependency and thus would be well served by the added mobility provided by BART. Please refer to Responses 107.112 and 107.117 for additional discussion on the location of stations in this area.

- 107.122. The report describes the area east of tracks near 380 as the city's largest industrial area....This, however, is not a large industrial area. The bulk of local industry occurs outside the city limits in SSF and is not served well by transit. This proposal does little to support all-around employment uses in the area....In the larger context this industrial area is really simply the outer edge of an industrial community centered in a completely different location.

**Response.** San Bruno's industrial area is small compared to the nature and scale of industrial development in South San Francisco and San Francisco International Airport. No single transit alternative could support the existing land use distribution of industrial, office commercial, and retail commercial development in San Bruno.

- 107.123. The description of the areas south of San Bruno Ave fails to mention that this area is the historical and current center of San Bruno. The "shopping district" is San Bruno's main street with axial relationships to CalTrain and the City Hall. From a planning point of view it is an important part of town. Typically transit is planned to support existing town centers so that transit related growth can occur around existing areas of intensity. The Tanforan location is attractive to BART not because of its urban character, but because it is close to a freeway interchange.

**Response.** The DEIR/Technical Appendix has been revised to reflect the commentor's input. On page 3.2-22 of the DEIR/Technical Appendix at the end of the first full paragraph, the following sentence is added:

This area is known as the Central Business District, or downtown San Bruno.

- 107.124. Figure 3.2-7 [of the DEIR/Technical Appendix]...shows a more sensible alignment between transit and land use because it includes the CalTrain route which is the historical axis of all development here. This should suggest that increasingly intense transit services should occur along historic routes where existing patterns of use and growth can support it.

**Response.** Most of the proposed BART alignments follow the existing railroad and CalTrain right-of-way. As cited previously, much recent development on the Peninsula, including major hotel, airport, and industrial projects, has not occurred along historic transit routes, but rather along the Highway 101 corridor. The BART alignment and station alternatives generally follow the historic transit corridor, while incorporating stations sites that minimize displacement and disruption of existing land uses.

- 107.125. The report notes that many Millbrae residents commute outside the city to work. This was also noted about San Bruno. It should be clarified that many of those jobs outside the city occur at the airport. The BART proposals will not serve that group effectively.

**Response.** Millbrae residents using the BART extension would primarily have destinations north of Millbrae, mostly within San Francisco. The residents of Millbrae and San Bruno who drive to work at SFIA were not forecasted by MTC's travel demand model to use the BART extension for access to the airport. SFIA employees from these two communities live too close to their work destination to make it worthwhile to drive to a BART station, park and ride a train to work. Some of these employees may use SamTrans buses to ride to SFIA or to a BART station and then transfer to access the airport.

- 107.126. The report notes that there are no particular activity centers along the project corridor in Millbrae. However, Millbrae has just completed renovations of Broadway and is continuing to initiate projects that will reinforce its character as a main street.

**Response.** The focus of the project corridor is to the east of El Camino Real, where the city presently does not have an activity center.

- 107.127. The report notes a commute flow toward Burlingame. Again the employment area is not served by a BART station. Local transit, ALRS and CalTrain will serve these needs more effectively.

**Response.** The BART stations in Millbrae would serve southbound commuters who work in Burlingame, often in conjunction with SamTrans bus service. The Millbrae Avenue Station under Alternative VI would provide service within walking distance of employment areas on Rollins Road, California Drive, El Camino Real, and Trousdale Drive.

- 107.128. Residential areas are described in more detail here than in other communities in order to show how far they are from the station rather than how close. In fact the residential areas described are quite close and will feel substantial impacts.

**Response.** During the course of extensive analysis conducted for the preparation of this document, no significant impacts to residential areas in Burlingame from the BART extension were identified.

- 107.129. The anticipated impacts are not, however, from a nearby transit station. That already exists. The impact will be caused by the background growth that will occur in Millbrae and which will be inconsistent with local uses and patterns.

**Response.** The land use in this area is already diverse, with the industrial park, medical buildings, commercial uses, and proximity to the airport. It is not clear what types of “inconsistent” growth would occur in Millbrae near either of the possible new stations.

- 107.130. Significance criteria: impact considered if it would detract from efforts to revitalize an area. This suggests that BART is not a service project but a redevelopment project whose intention is to spawn growth. If it is intended to spawn growth it should then comply with all aspects of local plans.

**Response.** The cited significance criteria relates to BART's potential impact on land use. This is only one area of potential impacts; impacts on transportation patterns, air quality, other environmental conditions, and government finance are other important measurement criteria for selecting a transportation improvement alternative.

- 107.131. An increase in employment opportunities is considered to be a beneficial impact.” This is not always the case and cannot be accepted as a blanket statement.

**Response.** The commentator is correct. An increase in employment opportunities would not be beneficial if a city did not seek additional employment opportunities; this is not the case for the communities in the project corridor.

- 107.132. According to state law, BART is not required to comply with local plans and policies; therefore, designations of significance are not made with respect to a project alternative's consistency with local general plans...”. Transit can be the most significant factor in shaping a region's identity and character. The current study area was originally shaped by a transit system and continues to grow around that system. It is absurd to suggest that the current project is not expected to adopt and accept local plans as a key element of its design.

**Response.** BART expects to work with local communities to design a system that is as compatible as possible with local planning policy. The statement reflects BART's enabling legislation, which states that “BART is not required to comply with local plans and policies.”

- 107.133. Note BART Policy 1 re local development. This policy is designed as a development policy which favors speculative growth around proposed stations. While this policy is attractive to developers, it is not necessarily a welcome element in local community planning.

**Response.** BART retains land use policy control over only the land that it owns; nearby land use remains under the control of the local jurisdiction. Development has only occurred around BART stations where the local city or county has supported such development. There are also cases where the local community has not supported land use intensification around stations and no development has occurred.

- 107.134. The San Francisco Peninsula is largely built out. It is not a typical environment for relatively unregulated growth. The communities already are well utilized and do not seek a disruption of existing patterns. The selection of the BART routes reveal this in that they travel through areas that are used the least intensively of the region.

**Response.** The selected Alternative VI LPA alignment along the Southern Pacific San Bruno branch to the SFIA terminal area and Millbrae Avenue in fact serves one of the most intensely utilized areas in the northern Peninsula.

The proposed Southern Pacific San Bruno branch alignment, common to all BART build alternatives, is the best approximation of a north/south corridor through San Bruno and South San Francisco of any single transportation corridor in these cities. The Tanforan Station, located near I-380, has the benefit of providing an alternative station for commuters from either Highway 101 or I-280. The proposed Airport International Station would serve the San Francisco Airport terminal area. The proposed Millbrae Avenue Station has the benefit of serving both the local Millbrae/Burlingame catchment area and commuters from the south via Highway 101.

- 107.135. This section describes the need for transit at the Hickey Station based on proposed growth around that station. The proposed growth, however, is based on the future BART station. That is called "Begging the Question." BART encourages growth around potential station locations to support transit, then states that a station at that location will be consistent with that growth.

**Response.** The City of South San Francisco has encouraged the Hickey Station location and discouraged the alternative Chestnut Road location.

- 107.136. Alternative VI is inconsistent with Millbrae Land Use Element 4. This alternative would significantly affect economic activity and tax revenues.

**Response.** The comment is consistent with Impacts 8 and 9, cited on page 3.2-53 of the DEIR/Technical Appendix. Please refer to Responses 107.110 and 107.132 regarding BART's obligation toward local plans and politics.

- 107.137. Project Corridor - This text suggests again that there is no value to acquiring services within existing neighborhoods or developing neighborhoods that provide those services. The dream of increased mobility is offered up as a reasonable goal for all. This dream does not create healthy neighborhoods. Instead it offers the ability to go to downtown San Francisco once a month as an equitable offset to having your neighborhood grocery store demolished.

**Response.** The purpose of the DEIR/SDEIS is to evaluate the impacts of the proposed BART extension, which would provide a beneficial impact from the improved access to BART. Other land uses might also have beneficial impacts, but this fact does not affect the benefits of BART.

- 107.138. Figure 3.3-7 [of the DEIR/Technical Appendix] - This image shows an environment devoid of humans, designed for autos only. El Camino Real is an important route and it should be lined with integrated uses and activity.

**Response.** Figure 3.3-7 of the DEIR/Technical Appendix shows El Camino Real, which is currently an auto-oriented main arterial through South San Francisco. There are opportunities for pedestrian-oriented integrated uses in this vicinity. Not visible in the visual simulation is the sidewalk that could help link the station with adjacent development. This is better seen in the Hickey Station site plan in Figure 2.2-4. The station-related development on nearby vacant or underutilized parcels is described in the DEIR/Technical Appendix in the Land Use section on pages 3.2-36 and 3.2-37. The City of South San Francisco has already planned for additional housing around the Hickey Station, and the station plan supports the city's proposals.

- 107.139. Figure 3.3-8 [of the DEIR/Technical Appendix] - This image shows a facility with no human connection to a town or any kind of community fabric....This image should also be developed as it will be seen from the adjacent Fifth Addition neighborhood.

**Response.** Figure 3.3-8 of the DEIR/Technical Appendix shows an existing and future view of the BART facilities from just north of the Fifth Addition neighborhood. The photograph of the existing setting, on top, shows that this area is a surplus parking lot and the "back door" of a regional shopping center. The proposed project does not create a new significant adverse effect.

However, based on further design review and consultation with the City of San Bruno, the Tanforan Station layout has been modified and is addressed in the FRDEIR/S#2DEIS. The revised conceptual plan would eliminate the proximity impacts in the Fifth Addition neighborhood. Under this modification, the station would be built adjacent to the Tanforan Shopping Center. The scale incompatibility identified would be minimized by reversing the station location and a widened Huntington Avenue West. The proposed widening of Huntington Avenue would include landscaping that would serve as a visual buffer between the Fifth Addition neighborhood and the BART alignment and station.

- 107.140. Figure 3.3-10 [of the DEIR/Technical Appendix] - Concrete walls with barbed wire, graffiti. These are not positive additions to a neighborhood.

**Response.** Concrete retaining walls are a necessary component of a retained cut configuration. The barbed-wire provides protection for the train below and prevents access to the open-trench. Please refer to Response 19.78 for a discussion of BART's zero tolerance policy on graffiti.

- 107.141. Figure 3.3-11 [of the DEIR/Technical Appendix] - It should be noted that all of these images are prepared for places that are currently blighted. The visual character of BART should not be measured against existing blight but against a community standard of acceptable visual quality.

**Response.** The visual simulations were prepared to illustrate the scale, form, and style of a BART facility. These images were not prepared for only blighted areas. For example, the viewshed in Figure 3.3-11 encompasses a wide area of San Bruno, including areas of well kept neighborhoods and commercial districts. Figure 3.3-7 depicts an area along El Camino Real which is not blighted but rather underdeveloped. Figure 3.3-10 shows an area in South San Francisco which is not blighted. The visual character of BART is measured against significance criteria established to allow for consideration of generally accepted community standards. The significance criteria are defined on page 3.3-28 of the DEIR/Technical Appendix.

An EIS/EIR must evaluate how a project changes the existing conditions, whether those conditions are blighted or of high quality. However, one criterion that fits the assessment desired by the commentator is whether the proposed project is consistent with adopted environmental goals, such as locally adopted general plans. The DEIR/Technical Appendix indicates which alternatives are consistent or inconsistent with general plans of project corridor communities.

- 107.142. Figure 3.3-13 [of the DEIR/Technical Appendix] - A parking garage across from single family homes. This is not a compatible use and it will only ensure the eventual destruction of this neighborhood in favor of more intensive uses.

**Response.** The commentator is making an observation that is consistent with the analyses in the DEIR/Technical Appendix. Figure 3.3-13 is presented in the DEIR/Technical Appendix to show readers the effects of the BART parking structure across the street from existing residences in the Belle Air neighborhood. The point made by using this graphic is that the BART garage would significantly and adversely affect the existing built environment. Furthermore, Impact 3 on page 3.2-93 of the Land Use section of the DEIR/Technical Appendix declares the station and garage to be incompatible with the residential neighborhood.

- 107.143. Figure 3.3-15 [of the DEIR/Technical Appendix] - [Center Street:] a street that once continued through various parts of a neighborhood now barricaded with concrete walls awaiting graffiti. Again this ignores existing patterns while offering a massive concrete intrusion into an existing neighborhood.

**Response.** The figure depicts BART in an aerial configuration over Center Street, as opposed to walls barricading the neighborhood. The figure is meant as an example; the actual station design has not been developed. As discussed in the DEIR/Technical Appendix on pages 3.3-69 and

3.3-82, the existing landscape is not well-defined and is auto-oriented. Please refer also to Response 19.78 for a discussion of BART's zero tolerance policy on graffiti.

- 107.144. Figure 3.3-16 [of the DEIR/Technical Appendix] - This is the clearest example of the failure of BART planning: the destruction of a viable downtown neighborhood, the removal of existing businesses and the creation of a parking lot.

**Response.** Figure 3.3-16 of the DEIR/Technical Appendix is intended to simulate the downtown San Bruno station option for Alternative V and Design Options V-A and V-B. The DEIR/Technical Appendix states that the Downtown San Bruno Station option would significantly alter the visual setting of downtown San Bruno. As required, the visual impacts of other proposed alternatives and their respective proposed mitigation measures are discussed equally in the DEIR/Technical Appendix. Under the Aerial Design Option LPA, the proposed project will run in a subway configuration through downtown San Bruno.

- 107.145. The report states that the proposed project is largely in subway and has few visual impacts. Yet each station is a massive facility larger than anything in most of the affected cities. Each station will have heavy vehicular traffic which will create a visual impact on all affected streets and highways.

**Response.** New station facilities would alter the visual settings at proposed station locations. Although some scale incompatibilities may be apparent. These facilities will be planned and designed in cooperation with each affected community, to be as visually compatible and harmonious as possible with surrounding uses.

- 107.146. Table 3.3-1 [of the DEIR/Technical Appendix]...omits many actual impacts. For example SSF station (Hickey) is not noted yet [the] previous photo shows the parking garage along El Camino. This indicates that the preparers consider the garage an acceptable design of high visual quality. This further points out the subjective nature of visual quality.

**Response.** Environmental professionals use agency-generated and industry-wide significant criteria to analyze visual impacts. Significant visual impacts are discussed for each of the proposed alternatives and mitigation measures are proposed for each alternative. Table 3.3-1 of the DEIR/Technical Appendix accurately compares the visual impacts of each alternative. Visual impacts related to the Hickey Station under all the BART build alternatives were determined to be insignificant based on the criteria spelled out on page 3.3-28 of the DEIR/Technical Appendix.

- 107.147. It is interesting that this portion of the report considers isolated items: buildings, sites. It does not consider the historical patterns of use that have remained nor does it consider the historical character of various neighborhoods and towns....This effectively states that history ended 45 years ago and no history is being created now. Or at best that current patterns of use, when put into future historical perspective need have no continuity with past patterns.

**Response.** National Register of Historic Places significance evaluations involve a number of steps, one of which is deciding the appropriate historic theme of a particular property. A theme is considered significant if it can be shown, by scholarly work, to be important in American history. For example, a few of the significant themes used in National Register evaluations include Social History, Transportation, Architecture, Ethnic Heritage, Exploration/Settlement, Industry, and Landscape Architecture. Deciding on the relevant theme for a property within the framework of the contextual history and determining what type of property it is involves consideration of past historic patterns of use and the historical character of a place. The National Register criteria also allow for the definition of the following different categories of historic properties: building, structure, object, site, and district. Work on the BART extension project thus considered the possibility that significant larger units, such as districts or structures (defined as functional constructions, such as highways, irrigation systems, tunnels, etc., not used for human shelter) could also exist within project boundaries. Five cemetery districts were, in fact, judged

significant. The 45-year rule (in actuality 50 years, with a 5-year buffer added) is based on the assumption that this much time provides perspective to make accurate judgments about what is significant historically. It does not mean that no history is being created now, only that the perspective of time is needed to see what parts of present-day history are important in the long term.

- 107.148. BART stations are typically isolated from the local community, resulting in higher crime rates. These issues are not addressed to any level of detail in this report.

**Response.** BART stations are typically located where they can serve the greatest number of people while causing the minimum disturbance to surrounding land uses. Please see Responses 14.57 and 16.2 for a discussion of crime.

- 107.149. Project limits shown [on] this map [Figure 3.6-3 of the DEIR/Technical Appendix] are inaccurate. Actual project limits will show boundaries further north, closer to historic earthquake epicenters in the Daly City area.

**Response.** The commentor's recommended edit relating to Figure 3.6-3 of the DEIR/Technical Appendix is correct. The project study area depicted in Figure 3.6-3 has been modified to more accurately reflect the study area. This change does not affect the environmental analysis because the analysis is based on the Maximum Credible Earthquake (see Response 107.150) and the recommended change does not change that analysis.

- 107.150. While a seismic event may cause damage to any structure, including surface roadbed, surface roadbed can be placed back in service more quickly, with less construction after an event. Mitigation via tougher design standards can offset the risk of structural failures, but it cannot generate flexibility within the system to respond to a wide range of post-event needs.

**Response.** All BART facilities are designed to withstand earthquake loading with reserve capacity. BART design criteria require that all operating facilities be designed "with sufficient strength to undergo the effects of the Maximum Credible Earthquake without significant degradation of structural integrity and with any damage easily repairable. It is the goal of this policy to avoid the interruption of BART operations due to failure or damage...."

- 107.151. BART's determination of insignificance for its own construction standards is arbitrary and inaccurate. BART systems are more dependent on high-risk construction: tunnels, subways, multi-level parking and station structures....The CalTrain system has fewer tunnels, fewer grade separations, no elevated track and very few retained cuts. All this occurs in existing right-of-way. By its basic design, it is more capable of surviving a seismic event and providing service more quickly afterwards.

**Response.** Please refer to Response 107.150 for a discussion on BART's ability to withstand a major earthquake. There is no evidence to indicate the accuracy of the commentor's last sentence.

- 107.152. The EIR offers mitigation measures that focus on re-creation of similar habitat at alternate locations. The methodology and design details of these mitigations are not clear and no indication of, or requirement for, anticipated success is stated.

**Response.** A detailed conceptual mitigation plan for habitat development with the required design and success-criteria has been developed for the proposed wetland creation site in the Colma Creek area in compliance with the Section 404 permit application in this FEIR/FEIS submitted to the US Army Corps of Engineers and now being reviewed. Mitigation proposals for both wetlands and habitat are included in Volume V of this FEIR/FEIS. Please refer to Response 4.4 for examples of these mitigation measures.

- 107.153. The TSM proposals do not have these affects on the subject area. The TSM alternative includes existing rail rights of way and existing station facilities.

**Response.** The TSM alternative also includes an intermodal station on the West of Bayshore parcel with the associated freeway on- and off-ramps. The impacts of this alternative are documented in the DEIR/SDEIS.

The TSM alternative relies heavily on existing resources; however, additional facilities will need to be built. Construction of Highway 101 on- and off-ramps would impact 0.10 acres of wetlands and construction of a parking lot would impact 0.83 acres of wetlands. Impacts to wetlands that support sensitive species range from 0 to 1.54 acres, depending on the alternative.

Please refer to Response 4.1 for a more detailed discussion of this issue.

- 107.154. The impacts are generated by a project that is out of scale with its needs and the communities it serves. That scale problem directly affects the quantities of excavation, site construction, paving, drainage manipulation, groundwater disturbance and habitat relocation. A project more closely tuned to actual needs would reduce all impacts.

**Response.** The commentor's general opposition to the project is noted. Public input regarding the merits of the alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Section 1.3 of the DEIR/Technical Appendix discusses the need for, and the purpose of, the proposed project.

- 107.155. The choice of route...is what generates the impact. A high intensity transit system passing through areas of low intensity utilization. The existing rail transit system already passes through industrial and urban areas except for portions of Millbrae. Its noise patterns are already established and planning policy already accounts for them.

**Response.** It is true that the selected BART alignment generates impacts. Many routes have been evaluated throughout the EIR/EIS process. The purpose of an environmental document is to study alternatives, assess impacts, and, where appropriate, propose mitigation for these impacts. Noise is just one of many factors that BART must evaluate in this process. The decision by BART to select one of the alternatives is based on an evaluation of all of the factors.

- 107.156. There is no mention of traffic noise and related impacts around stations and parking garages. 1,500 and 3,000 car open parking garages will create and amplify noise from street level and from elevated levels. This noise will have the capacity to travel longer distances when generated above ground. Traffic noise will begin early in the morning and occur at maximum levels throughout the commute hours at each station.

**Response.** Traffic impacts have been evaluated using data from the traffic analysis for each of the alternatives. There is no reason that parking garages should "amplify" automobile noise either from street or elevated levels. Compared with other local traffic noise, the noise associated with parking garage use is not expected to create significant noise impacts for the parking garages studied.

- 107.157. Each BART station is dependent on huge numbers of passengers arriving by auto from a long distance away to justify the system size and cost. Those travel miles required to get to a BART station are reflected here and are probably underestimated.

**Response.** Most BART patrons do not drive long distances to access BART stations. MTC's mode choice modeling forecasts restrict auto access to the BART extension stations at the city limits between the cities of San Mateo and Belmont because people driving long distances would

not generally change modes to complete the journey. The estimates of vehicle miles traveled are believed to be accurate and are not underestimated.

- 107.158. PM<sub>10</sub> impacts were evaluated by comparing BART build alternatives with the No-build alternative. The build alternative clearly presents an improvement but it is doubtful whether that improvement would show when compared to TSM.

**Response.** As stated in the DEIR/Technical Appendix, Page 3.10-13, second major bullet, there is no EPA-approved method for performing quantitative analysis of local PM<sub>10</sub> concentrations. For this reason, analysis of local PM<sub>10</sub> impacts is not required for air conformity assessment, and was not performed as part of the DEIR/SDEIS.

Evaluation of regional PM<sub>10</sub> impacts is based on a comparison of regional vehicular PM<sub>10</sub> emissions under the BART build alternatives, with those under the No Build Alternative in the 1993 analysis year. Please refer to response 107.159 for the rationale behind this comparison. A comparison of vehicular emissions, if the proposed project is constructed, against regional vehicular emissions under the TSM alternative in the same analysis year can be made from data included in Table 3.10-5 of the DEIR/Technical Appendix. Such an analysis shows that regional VMT, and therefore regional vehicular emissions, are higher with the proposed project than the TSM alternative.

- 107.159. Table 3.10-6 [of the DEIR/Technical Appendix]...shows net regional emissions as a result of the LPA. This information would be of value if it were compared to reductions due to No-build for an equivalent year. Footnote 1 states that these numbers show reductions in emissions from year to year when compared with No-build for 1993 only. That means that this table also includes reductions caused by tighter emissions standards for autos, fuels and systems, causes unrelated to the BART project. In other words, by this method the No-build alternative will also show substantial reductions in subsequent years. Since State and Federal regulations will require lower emissions over the study period anyway, it is inappropriate for BART to take credit for this reduction.

**Response.** Contrary to the commentor's assertion, BART is not "taking credit" for emission reductions resulting from lower automobile emissions standards and fuels requirements. However, a primary purpose of the DEIR/Technical Appendix is to compare the existing environment (the 1993 base year) to conditions expected when the project is completed. Thus, the commentor correctly states that the DEIR/Technical Appendix, Table 3.10-6, compares regional vehicular emissions under the proposed project with those under existing conditions, i.e., the No Build Alternative in the 1993 analysis year. This comparison is made to satisfy the requirements of the California Environmental Quality Act (CEQA).

Using data from Table 3.10-5 in the DEIR/Technical Appendix, a comparison of regional vehicular emissions under each BART alternative with those under the No Build Alternative in the *same* analysis year reveals the following:

- Regional vehicular emissions under the No Build Alternative are, of course, equal to those under the No Build Alternative in the same analysis year.
- Regional vehicular emissions under the TSM Alternative are 0.5 percent lower than those under the No Build Alternative in the same analysis year.
- Regional vehicular emissions under the proposed project are 0.3 percent lower than those under the No Build Alternative in the same analysis year.

- Additionally, regional vehicular emissions under the proposed project are 0.1 percent greater than those under the TSM Alternative in the same analysis year.
- 107.160. If you compare data in Table 3.10-5 [of the DEIR/Technical Appendix], reductions can also be shown for no-build which are substantial....This additional calculation clearly shows that reductions in emissions are not caused by BART alternatives. The differences in emissions between LPA and No-build are less than 1 percent.
- Response.** Please refer to Response 107.159 for a comparison of regional vehicular emissions under each BART alternative with those under the No Build Alternative in the same analysis year.
- 107.161. The EIR is suggesting that the construction of BART will reduce these emissions by reducing traffic. Yet elsewhere the report clearly states that traffic is not reduced. The critical number to look at is VMT.
- Response.** As described in more detail in Responses 107.36 and 107.159, the predicted reduction in regional vehicular emissions under the BART build alternatives versus those under existing conditions is due almost entirely to an expected reduction in vehicular emission factors, not to a reduction in vehicle miles traveled. However, comparison of regional emissions under BART build alternatives versus those under the No Build Alternative in the same year (see Response 107.159) indicates that construction of BART, in itself, would result in reduction of regional vehicular emissions, because the project will reduce regional VMT. See Table 3.10-5 in the DEIR/Technical Appendix.
- 107.162. There is no doubt that trip reduction will occur. The quantity of that reduction is questionable. BART is still heavily dependent on auto trips for ridership numbers. TSM and expanded CalTrain service has the potential to reduce auto trips to a much greater extent for lower cost. By utilizing stations located nearer to concentrations of residents and employees, the trip reduction will be substantial.
- Response.** The reduction in auto trips is based on MTC's mode choice model, which is commonly accepted as an accurate model. Please also refer to Response 107.75 for an additional discussion on this issue.
- 107.163. Table 3.12-3 [of the DEIR/Technical Appendix]...shows energy consumption for motor vehicles under 3 alternatives. It is assumed that these numbers are derived from VMT estimates, yet they are disproportionate to those estimates shown in Table 3.10-5.
- Response.** The column headings, in Table 3.12-3 on page 3.12-7 of the DEIR/Technical Appendix, were transposed and are revised as follows:
- | Fleet Mix | No-Build<br>Proposed Project | TSM<br>No Build | Proposed Project<br>TSM |
|-----------|------------------------------|-----------------|-------------------------|
|-----------|------------------------------|-----------------|-------------------------|
- 107.164. Table 3.10-5 [of the DEIR/Technical Appendix] shows VMT lowest for the TSM alternative and highest for No-Build. This table shows energy use highest for TSM and lowest for LPA. This is a rather glaring inconsistency.
- Response.** Please refer to Response 107.163 for an explanation of the inconsistency.
- 107.165. This project can be considered too large for actual needs based on virtually all of the criteria. Excessive construction impacts will be the result of that failure. Additionally, the details, methods and materials required to mitigate impacts due to inappropriate planning increase construction impacts exponentially. A system planned along the existing corridor utilizing

existing infrastructure and systems will greatly reduce construction impacts as well as all other impacts.

**Response.** The commentor's general opposition to the project is noted. An EIS/EIR is an informational document to assist the decision-makers in reaching a well-informed decision based on an assessment of significant environmental impacts. The decision-makers will balance significant construction impacts against other aspects of the proposed project to reach an overall opinion regarding the project's merit. Please refer to Response 129.1 for a discussion of the justification and need for the proposed project.

- 107.166. This section [4.2] discusses unavoidable impacts. The determination of "unavoidable" is arbitrary and based on the assumption that a BART project will proceed.

**Response.** It is true that identification of an unavoidable impact is possible only if one assumes that the project is implemented. If this assumption were not made, there would be no point to preparing an environmental document pursuant to CEQA and NEPA. These statutes require that a lead agency consider the effects if a project were to proceed. A purpose of this investigation is to help the decision-makers determine the merits of the project. To assist in this decision-making process, the DEIR/Technical Appendix makes explicit the criteria used to determine whether an impact is significant or not. These criteria are determined in accordance with the CEQA and CEQ guidelines, in consultation with resource and other responsible agencies, and in accordance with threshold accepted and other environmental standards; they are not arbitrary.

For those impacts deemed significant (through application of the criteria), mitigation measures are recommended. Assuming that the measures are adopted and implemented, the environmental document must disclose whether the impact would be reduced to a level of insignificance (again, by considering any residual effects after implementation of the mitigations against the identified significance criteria). A purpose of this disclosure is to help the decision-makers understand the modifications to the particular alternative under consideration that will be required in order to reduce the environmental consequences of that alternative. Selection of another alternative is always another recourse available to the decision-makers.

- 107.167. Here the report describes land use deterioration that will occur as a result of the TSM alternative. This deterioration is not quantified and appears similar to that of other alternatives. This is clearly not the case. The TSM alternative offers the best scenario for preserving existing uses and supporting compatible uses.

**Response.** It is not clear where on page 4-5 the commentor is reading that the TSM Alternative would result in land use deterioration. Page 4-5 indicates that displacement resulting from implementation of the TSM Alternative would disrupt shopping, circulation, and neighborhood patterns and activities. It is true that the information has not been quantified for this alternative, but neither has it been quantified for any of the other alternatives. Table 2.4-2 provides a comparative assessment of the alternatives for various environmental consequences. In that table, it is made clear that the amount of displacement associated with the TSM Alternative is minimal. Nevertheless, the displacement that would occur would indeed result in unavoidable adverse effects.

- 107.168. This section states that non-retrievable resources for construction and operation of BART are offset by reduction in auto trips, yet the entire system is planned around auto access. BART demands greater auto access than the other alternatives by virtue of system planning alone.

**Response.** Regardless of the rail mode selected to provide improved transit services along the Peninsula, automobile access will be the primary means of getting riders to the system. The decision-makers, however, must take into account how effective BART might be at reducing the overall use of automobiles. Those motorists driving to the BART system will no longer be making the longer commute trip in their personal vehicles. Table 3.12-3 in the Energy section of

the DEIR/Technical Appendix shows that the total energy consumption for motor vehicles in the Bay Area region would be less with a BART extension than under the No Build or TSM alternatives.

- 107.169. This still ignores the specifics of where people commute. This paragraph also states that transit can induce growth which is clearly what BART wishes. That is what will create the numbers that eventually justify the system. With limited resources it seems more important to develop transit where it is needed than to create a new need without satisfying the existing one.

**Response.** The extension of BART farther south in San Mateo County allows commuters throughout San Mateo, San Francisco, Alameda, and Contra Costa counties to travel to their destinations by rail transit. As noted in earlier responses to the commentor, the selection of this project corridor has evolved from more than 20 years of transportation planning studies that have considered commute patterns and travel demand. These studies have demonstrated a strong need for transit service southward to jobs in San Mateo County as well as the historical pattern of northbound commuting to San Francisco. Thus, there is a strong body of evidence to support the claim that there is an existing need and that BART is not building the system simply to create a need.

- 107.170. Paragraph 3 [on page 4-24 of the DEIR/Technical Appendix] states that growth may occur regardless of the extension, but that it may shift to take advantage of BART. This implies that it could also easily shift to take advantage of a cheaper, more sensible system.

**Response.** The authority to direct more intensive land uses towards transit services resides with local jurisdictions. Ideally, transportation planners would design and plan their routes to traverse areas that local governments wish to intensify and/or revitalize. The public investment in transit and the accessibility offered by the transit service are important ingredients in fulfilling local development objectives. The actual shift in land use patterns will be affected not only by transit availability, but also the availability of land and local policies regarding development intensity.

- 107.171. Under TSM, the report plays down potential growth based on the “built-out” character of the subject area. This ignores redevelopment which is included in most forecasts for build alternatives. TSM does not include downtown extension and resulting system wide growth for CalTrain.

**Response.** Redevelopment has not been assumed for any of the alternatives except where there is already an existing redevelopment plan. Thus, growth inducement in the vicinity of transit station is recognized as a possibility at the Hickey BART Station because the City of South San Francisco has adopted a redevelopment plan for the area. The built-out character of CalTrain stations in the project corridor is provided to explain why growth inducement would be limited under the TSM Alternative. By the same token, this same rationale is given for why many of the BART stations in the project corridor are likewise not assumed to trigger much induced growth. This discussion does not unfairly portray the potential growth of the TSM Alternative.

- 107.172. This section lists outstanding issues to be resolved. This list is entirely inadequate to address the number of concerns that remain. The list does not weight these items and suggests that some simple mitigation will be adequate. Unavoidable impacts have been ignored completely.

**Response.** The list of “issues to be resolved” is not intended to be exhaustive, but rather to highlight the critical areas still under consideration. As part of the decision-making process, the BART and SamTrans Boards of Directors will need to make specific findings that consider the feasibility of mitigation measures and the merits of the project relative to the unavoidable adverse effects. More specifically, CEQA Guidelines, Section 15091, require that the boards find that:

- changes have been required or incorporated into the project which avoid or substantially lessen the significant environmental effects,

- such changes are within the responsibility and jurisdiction of another public agency and that they have been adopted by the other agency, or
- specific economic, social, or other considerations make infeasible the mitigation measures or project alternatives.

These findings must be supported by substantial evidence in the record. If the agency decides to approve the project and there remain unavoidable effects, additional findings are required to demonstrate that the benefits of the project outweigh the unavoidable environmental effects.

108. DUBOIS, MIKE

108.1. I..favor "No Build"...

**Response.** The commentor's preference for the No Build Alternative is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the alternative selection process; however, the Alternative VI Aerial Design Option was selected as the LPA by both boards. Please refer to Response 2.7 for a discussion of the LPA selection process. Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18.

108.2. If the project passes I favor underground transportation.

**Response.** The commentor's general support for an underground alignment is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. The selected LPA (the Alternative VI Aerial Design Option) incorporates a subway design along most of the proposed route, except in the vicinity of the SFIA parcel west of Highway 101 and around the Millbrae Avenue Station.

109. EVERETT, DOROTHY

109.1. There are so few, if any[,] improvements for the people most affected by BART.

**Response.** The LPA selected by the BART and SamTrans boards in November 1995 incorporates a joint BART/CalTrain station at Millbrae Avenue Station. An Airport Light Rail System (ALRS) would serve the main terminal, the planned international terminal, and SFIA employment center to the north.

110. FALSARELLA, JOHN AND JOSEPH W. CAIMOTTO

110.1. We do not need or want [any] part of BART any where in Millbrae....

**Response.** The commentor's opposition to BART in Millbrae is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The LPA would include a new intermodal station at Millbrae Avenue.

110.2. We will not have to displace about 200 or three hundred people, tear down their homes and force them to move.

**Response.** The commentor is expressing opposition to Alternatives IV, V and VI, involving displacement of houses in Millbrae. The commentor's opinion is noted.

110.3. We will not...mak[e] our light industry businesses move in that area to make room for a three thousand car garage, and a BART station.

**Response.** There is no light industry proposed for displacement in Millbrae by the BART extension.

110.4. We do not want and will not start another Commercial Business Zone at the end of Millbrae Avenue.

**Response.** The commentor's opinion is noted. Please refer to Response 107.133 for a discussion of land use policy.

110.5. We want to use those 25 acres for Industry or Light Industry and buil[d] factories...Not to buil[d] a 3,000 car garage.

**Response.** The commentor is expressing opposition to Alternative VI. It is unclear which 25 acres are being referred to and what the feasibility of industrial development would be.

110.6. The Airport Expansion will bring 70,000 thousand automobiles on 101 freeway...and BART will bring another 15,000 autos in our area....

**Response.** Significant and unavoidable traffic impacts associated with the BART extension would occur at one intersection, El Camino Real and Millbrae Avenue, and on segments of Highway 101 south of the SFIA. These impacts are identified in the DEIR/SDEIS, page 3.1-92. The majority of BART-related traffic on local streets would be a redistribution of existing traffic where drivers would take new routes to access a BART station. Most vehicle trips that originate farther from a BART station would use Highway 101 and have a short distance to travel between Highway 101 and the end-of-the-line BART station. Vehicles traveling from Highway 101 to the San Bruno I-380 Station or the Downtown San Bruno Station would have to travel slightly longer distances under Design Options V-A and V-B, but San Bruno Avenue would be improved and widened under these alternatives. The other exception where drivers from a freeway would have to use local streets would be drivers accessing a BART station from I-280. A small number of drivers may use Trousdale Drive in Millbrae or Sneath Lane in San Bruno, but the analysis in the DEIR/SDEIS indicates that this traffic would not create significant impacts to these or other streets.

## 111. FAY, JAMES S

111.1. I am writing to share my support for the extension of BART service to the San Francisco Airport, and I include, for the record, the results of the public opinion survey which speaks directly to the strong support for this important transportation project among Bay Area residents.

**Response.** The commentor's support for a BART extension to the SFIA is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (see Response 2.7 for a discussion of the LPA selection process). The LPA includes a direct BART line to the SFIA.

## 112. FERNANDO, DAVID

112.1. I note that there are no plans or proposals to institute an intersection at the T-shaped corner of Camaritan and Hickey Boulevard....When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course, will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto to Hickey impossible.

**Response.** Please refer to Response 80.1 for a discussion of left turns onto Hickey Boulevard.

- 112.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure for the Hickey Boulevard extension.

- 112.3. I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will...have the least impact with respect to noise and vibration.

**Response.** The commentor's support for the proposed project (the 1992 LPA) due to the subway design is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. The selected LPA (the Alternative VI Aerial Design Option) also incorporates a subway design along most of the proposed route, with the exception of the Tanforan Station vicinity (at which the line is slightly below grade) and the final segment approaching the airport (which has an aerial configuration).

#### 113. FIELD, LINDA L.

- 113.1. I am writing to express my opposition to BART being extended through Burlingame. I support...an alternative plan to improve CalTrain, but NOT to extend BART.

**Response.** The commentor's opposition to the BART extension is noted. CalTrain serves the Peninsula but is not connected directly to the airport. In addition, BART and CalTrain lack a convenient transfer point. Only the proposed BART extension would meet these needs. See Response 9.1 for a discussion of the status of studies concerning the extension of CalTrain into San Francisco. As discussed in Response 2.7, the selection of the Alternative VI Aerial Design Option does not preclude any CalTrain improvements. Background studies demonstrating the need for a rail project south of Colma are discussed in Response 79.18.

#### 114. FIJANA SALAD BAR & SANDWICH SHOP

- 114.1. I am writing to express my support for a bored tunnel construction option for BART through our downtown.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (see Response 2.7 for a discussion of the LPA selection process). A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, please refer to Response 17.68 for a discussion of those reasons.

#### 115. FISHER, ALICE

- 115.1. Plans... IV and V...would involve the complete loss of the Millbrae Nursery School, its outstanding play yard, plus heritage trees...see that BART chooses another plan which does not involve the elimination of the nursery school.

**Response.** The Millbrae Nursery School would be displaced only under Alternatives IV and V, as well as under Design Options V-A and V-B. These and other impacts were considered by the BART and SamTrans boards during the LPA selection process in November 1995 (see Response

2.7). The Alternative VI Aerial Design Option selected as the LPA by both boards would not displace the nursery school.

116. FOGARTY, JANET

- 116.1. The No Build alternative is painful to our City because the traffic caused by the SFO Airport expansion will leave this town with no way in and no way out. As disclosed in the Airport's EIR, the surrounding highways, and our local streets, will all go to gridlock because of the 70,000 new auto trips that will surge onto our roadways.

**Response.** The commentor's opposition to the No Build Alternative is noted. Please refer to Response 2.7 for a discussion of the proposed project and the process through which alternatives were evaluated.

- 116.2. The TSM alternative is painful for Millbrae because, as much as we support the extension of CalTrain to Downtown San Francisco and the upgrade of CalTrain service to rapid transit levels, the extension, upgrade, and electrification of CalTrain is underfunded....TSM cannot happen concurrently with Airport expansion...[and also] handle the Airport traffic. The TSM Alternative does not serve the Airport directly. Therefore, under the TSM alternative, the roadways go to gridlock.

**Response.** The commentor's opposition to the TSM Alternative is noted. Please refer to Response 2.7 for a discussion of the proposed project and the process through which alternatives were evaluated. As discussed in Response 2.7, the selection of the Alternative VI Aerial Design Option does not preclude any CalTrain improvements.

- 116.3. The Base Case and Old Locally Preferred Alternative significantly impact an enormous area of wetlands and open space which cannot be replaced. Further, it is the habitat of endangered species, and their habitat, in its present size, cannot be replicated. This open space provides an important buffer to the people who live in the neighborhoods of North Millbrae, Airport Park, and Marina Vista.

**Response.** The commentor's opposition to the Base Case Alternative (Alternative III) and the Proposed project (the 1992 LPA) due to wetland impacts is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). Under the Alternative VI Aerial Design Option, no sensitive wetlands habitats would be permanently disturbed, although 0.87 acres of creekside and aquatic habitats would be lost in the vicinity of the Hickey Station for this alternative (and all of the build alternatives). Under mitigation measures proposed by BART, wetlands can equal wildlife habitat values would be created to compensate for the minor wetlands loss.

The replacement of lost wetlands has been a viable mitigation measure for this type of impact throughout the United States. The wetlands in the project corridor have already been altered and are in their present condition due in large part to human actions, and there is significant evidence to show that similar wetlands can be developed in the project area that would serve to replace the wetland areas lost.

- 116.4. Alternatives IV and V are even more adverse to the quality of life for the residents in our north Millbrae neighborhoods, and the elementary and nursery schools. The station at Center Street, besides the traffic, infrastructure, noise, air quality, and safety issues that also exist under the Base Case and LPA, is simply very bad land use planning.

**Response.** The commentor's opposition to Alternatives IV and V due to neighborhood impacts is noted. Please refer to Response 2.7 for a discussion of the proposed project and the process through which alternatives were evaluated.

- 116.5. Only Alternatives V-A and VI avoid these impacts to Millbrae, and those alternatives have other significant adverse impacts which must be mitigated in order to gain community acceptance for this Project. However, there are feasible mitigation measures for most of the significant impacts caused by Alternative VI, and the City of Millbrae will forward its comments in writing as to the mitigation measures it requires in order to support Alternative VI.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

## 117. FOGARTY, PETER

- 117.1. BART must go into the airport.

**Response.** The commentor's support for a BART extension to the SFIA is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (see Response 2.7 for a discussion of the LPA selection process). The LPA includes a direct BART line to the SFIA.

- 117.2. CalTrain will never go downtown [to] S. F. because of the Hazardous-materials...health problem.

**Response.** Hazardous materials contamination in downtown San Francisco is outside the scope of the environmental analysis for the BART airport extension.

- 117.3. BART should consider, design...build and fast-track methods of construction to include multiple shifts for workers. Big money for construction now means clean[,] low cost later.

**Response.** BART plans to implement the project by design/build, which will minimize the duration of the construction period. Multiple shift work may not be practicable due to noise levels and other disruption in the neighborhoods. These details will be worked out between the contractor and the various cities.

## 118. FRANK, L.

- 118.1. BART should go into SFO.

**Response.** The commentor's support for a BART extension to the SFIA is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (see Response 2.7 for a discussion of the LPA selection process). The LPA includes a direct BART line to the SFIA.

- 118.2. There is enough space at Tanforan for BART/SamTrans with air space for parking over Huntington Avenue (without destroying any homes).

**Response.** No homes would be taken by any of the Tanforan Station plans under any of the alternatives evaluated in the DEIR/Technical Appendix.

Please see the site plans and sections for the different Tanforan station plans under the different Alternatives on pages 109, 110, 111 and 112 of the Design Appendix.

**119. FUCIGNA, GEFFREY W.**

- 119.1. I am writing in support of the BART extension through northern San Mateo County.

**Response.** The commentor's general support for the project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (see Response 2.7 for a discussion of the LPA selection process). The LPA includes a direct BART line to the SFIA.

- 119.2. I believe San Mateo County would be much better served by SamTrans directing some of its resources away from CalTrain and into BART operations.

**Response.** BART and CalTrain are both essential commuter services, and SamTrans is encouraging development of both services in order to provide more options to the traveling public, in the interest of the common good. Please refer to Response 10.1 for a discussion of the SamTrans commitment to providing CalTrain, bus, and BART services to the residents and businesses of San Mateo County.

**120. FUENTES, CAROL AND JOHN**

- 120.1. I note that there are no plans or proposals to institute an intersection at the T-shaped corner of Camaritas and Hickey Boulevard....When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto Hickey virtually impossible.

**Response.** Please refer to Response 80.1 for a discussion of BART-related traffic on Hickey Boulevard.

- 120.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure on the Hickey Boulevard extension.

- 120.3. I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will have the least impact with respect to noise and vibration.

**Response.** The commentor's support for the proposed project (the 1992 LPA) due to the subway design is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. The selected LPA (the Alternative VI Aerial Design Option) also incorporates a subway design along most of the proposed route, with the exception of the Tanforan Station vicinity (at which the line is slightly below grade) and the final segment approaching the airport (which has an aerial configuration).

**121. GAEBOZ, ROBERT AND RUTH**

- 121.1. Please consider stopping BART at Colma, and cooperating with CalTrain...

**Response.** The commentor's general opposition to the project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. The Alternative VI Aerial Design Option was selected as the LPA by both boards (see Response 2.7 for a discussion of the LPA selection process). Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are discussed in Response 79.18. As noted in Response 2.7, extension of BART to the SFIA does not preclude further improvements to CalTrain.

**122. GARRISON, PETER C.**

- 122.1. I write on behalf of Millbrae Nursery School which would be eliminated according to plans IV and V of your BART extension....Don't mess with it.

**Response.** The Millbrae Nursery School would be displaced only under Alternatives IV and V, as well as under Design Options V-A and V-B. These and other impacts were considered by the BART and SamTrans boards during the LPA selection process in November 1995 (see Response 2.7). The Alternative VI Aerial Design Option selected as the LPA by both boards would not displace the nursery school.

**123. GARTNER, DEBBIE**

- 123.1. If alternative IV or V were chosen, forcing our closure at our current location, we, the parent board [of Millbrae Nursery School], would insist that BART relocate us to a space in Millbrae, providing us with a comparable facility and play yard.

**Response.** Under Alternative IV or V, Center Street would be widened, which would impact Millbrae Nursery School access. A strip of land fronting the nursery school would be required for the street widening. This partial acquisition would not require acquisition of Millbrae Nursery School or displace the school permanently. However, if the Millbrae Nursery School were acquired or closed permanently because of the project, the nursery school would be compensated in accordance with federal and state relocation laws as applicable to businesses and non-profit groups. The Alternative IV Aerial Design Option was selected as the LPA by the SamTrans and BART boards would not displace the nursery school.

**124. GARVER, CONNIE J. AND HUTHISON, MARK**

- 124.1. Our first choice is no BART in San Bruno. If this is not an option, then the intermodal station at Tanforan that buys out the Fifth Addition would be most preferable. If neither of these options are possible, then please have no access from the BART station to the Fifth Addition neighborhood so we can continue to live as peacefully as possible.

**Response.** The commentor's opposition to extending BART through San Bruno is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. The Alternative VI Aerial Design Option was selected as the LPA by both boards (see Response 2.7 for a discussion of the LPA selection process). Please see Response 14.57 for a discussion of BART's security measures that address crime in and around BART stations.

**125. GEASLAND, CLAUDIA**

- 125.1. After (30) years of just talk, San Mateo still won't move with times like the others. What is holding them up?....We've become so heavily populated that even our freeways can't handle the traffic somewhere, someone or many have to be sacrificed for the good of all.

**Response.** The commentor's support for timely mass transit through San Mateo County is noted. In 1984 and 1985, the Metropolitan Transportation Commission (MTC) undertook a Peninsula Mass Transit Study which recommended a long-term strategy for improving and expanding rail service on the San Francisco Peninsula. In response to that study, FTA authorized the federal AA/DEIS process for a project corridor in northern San Mateo County.

Because approval from both federal and state entities is required for the BART-San Francisco Airport Extension project, the project has had to address both the California Environmental Quality Act (CEQA) and the National Environmental Quality Act (NEPA). This involves extensive study of multiple alternatives and design options, and preparation of extensive documentation to address public concerns and environmental issues.

More detailed information is contained in Chapter 1 of the DEIR/SDEIS and the FRDEIR/S#2DEIS, which further describe the process which has led to the selection by the BART and SamTrans boards of Alternative VI, in spring 1995, and the Alternative VI Aerial Design Option, in November 1995, as the Locally Preferred Alternative.

- 125.2. Graveyards yards should not be intruded upon underneath. BART should be on level ground.

**Response.** The Town of Colma and the cemeteries have requested that BART be underground. The right-of-way is between El Camino Real and the burial areas, not beneath the burial areas of the cemeteries.

- 125.3. BART doesn't pollute, cars do!

**Response.** The commentor correctly notes that BART trains are not a direct source of air pollutant emissions.

- 125.4. I don't mind BART staying in Colma, but something must be done about the transportation. Perhaps improving CalTrain is the way to go, if the people of San Mateo County don't want BART.

**Response.** Please refer to Response 2.7 for a discussion of the proposed project and the process through which alternatives were evaluated. The TSM Alternative, which includes BART to Colma and increased CalTrain service, was analyzed in the DEIR/SDEIS. Chapter 3.1, Transportation, in the DEIR/Technical Appendix addressed impacts related to transit, traffic, parking, pedestrian and bicycle access, and freight for every alternative studied.

- 125.5. What do other cities like: New York, Chicago, Cleveland and Atlanta, do to get...good mass transit going?

**Response.** The New York, Chicago, and Cleveland subway, street car, and/or commuter rail systems were all developed before the turn of the century by private companies and were later acquired by the public transit operator. The Atlanta rapid rail system was built with the same process that is proposed for developing the BART extension, i.e., the rail was built with mostly federal dollars and follows rigorous environmental documentation.

The New York subway system was originally built and operated by three private companies and later acquired by New York Metropolitan Transit Authority. The Cleveland street car system was acquired from private companies by the Greater Cleveland Regional Transit Authority. The Chicago Transit Authority acquired most of its rail system from private operators and the railroads. Since acquisition of the rail systems from private operators, New York, Cleveland, and Chicago have modernized the systems and in some case expanded the original systems. The Atlanta rapid rail transit system was built in stages for the Metropolitan Atlanta Rapid Transit

Authority (MARTA) with approximately 80 percent federal monies during the 1970s, 1980s and 1990s.

- 125.6. Why can't [we] use mass transit to improve what [we] have but go further south than San Mateo. Parking can be utilized at the Airport and eastside of the freeway. Perhaps improving CalTrain is the way to go.

**Response.** Your support for the CalBART proposal with parking on the eastside of the Bayshore freeway is noted. Please refer to Response 13.4 for a discussion of the CalBART proposal.

- 125.7. I...liked what the man said about this being a political issue not a BART issue. Very interesting!

**Response.** The commentor's interest in the political aspect of the issue is noted.

#### 126. GENARDINI, PIA

- 126.1. All the proposals presented are not acceptable to the residents of San Bruno, Millbrae, and Burlingame. We do not want BART in our neighborhoods.

**Response.** The commentor's general opposition to the project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. The Alternative VI Aerial Design Option was selected as the LPA by both boards (see Response 2.7 for a discussion of the LPA selection process). Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are discussed in Response 79.18.

#### 127. GEVERTZ, BARRY

- 127.1. In order to not have a tremendous negative impact on Lullaby Lane, a bored tunnel underneath San Mateo Avenue and continuing past Angus is the only solution...

**Response.** Please refer to Response 17.68 for a discussion of the tunnel construction option through downtown San Bruno.

#### 128. GIANNINI, LAURA AND ROBERT

- 128.1. I note there are no plans or proposals to institute an intersection at the T-shaped corner of Camaritas and Hickey Blvd. When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course, will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto to Hickey impossible.

**Response.** Please refer to Response 80.1 for a discussion of left turns onto Hickey Boulevard.

- 128.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure on the Hickey Boulevard extension.

- 128.3. I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will have the least impact with respect to noise and vibration.

**Response.** The commentor's support for the proposed project (the 1992 LPA) due to the subway design is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. The selected LPA (the Alternative VI Aerial Design Option) also incorporates a subway design along most of the proposed route, with the exception of the Tanforan Station vicinity where the line is slightly below grade, and the final segment approaching the airport, which has an aerial configuration.

129. GIGI, LAURA

- 129.1. I don't want BART in my backyard....SamTrans is a sufficient transportation system to transport community residents "within" our community. We don't need BART to do this!!

**Response.** The commentor's general opposition to the project is noted. SamTrans alone, however, does not meet the goal of providing BART access to the airport. Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are discussed in Response 79.18. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. The Alternative VI Aerial Design Option was selected as the LPA by both boards. Please refer to Response 2.7 for a discussion of the LPA selection process.

130. GIPE, WILLIAM

- 130.1. I feel that the most important link in BART to SFO expansion is a peninsula transfer station to CalTrain. Electrification and expansion of CalTrain is the future for rail transit on the peninsula. BART should be part of CalTrain's future role.

**Response.** The commentor's concerns are noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (see Response 2.7 for a discussion of the LPA selection process). The new LPA would incorporate a joint BART/CalTrain station at Millbrae Avenue. As noted in Response 2.7, implementing the LPA does not preclude further improvements to CalTrain, including extension into downtown San Francisco.

131. GLADSTONE, VICTOR W.

- 131.1. For San Bruno, how the tunneling is to be done is very important.

**Response.** The commentor correctly notes that the method of constructing BART through San Bruno is very important. Two options are described in the DEIR/SDEIS: cut-and-cover versus tunneling (the latter option is presented on page 2-76). Please refer to Response 66.115 for a discussion of some of the impacts of each. These impacts, along with public comments, have been considered. Alternative VI includes a subway through downtown San Bruno by cut-and-cover methods.

132. GOLDEN GATE CLOCK HOUSE

- 132.1. I am opposed to a cut-and-fill construction for BART coming through San Bruno. I am not against BART -- but I am against the disruption this kind of construction would cause. It would kill my business. I would have to relocate.

**Response.** The commentor's preference for a bored tunnel through San Bruno is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected Alternative VI Aerial Design Option (please refer to Response 2.7 for a discussion of the LPA selection process). A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

133. GOLDMAN, CHRISTINE

- 133.1. I believe we should continue pursuing...the extension plans to the Airport/Peninsula.

**Response.** The commentor's general support for the project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected Alternative VI. Please refer to Response 2.7 for a discussion of the LPA selection process. The LPA includes a direct BART line to the airport.

- 133.2. Two of the proposed plans would completely eliminate Millbrae Nursery School, its yard and heritage trees. That would be a crime.

**Response.** The Millbrae Nursery School would be displaced only under Alternatives IV and V, as well as under Design Options V-A and V-B. These and other impacts were considered by the BART and SamTrans boards during the LPA selection process in November 1995. Please refer to Response 2.7 for a discussion of the LPA selection process. The Alternative VI Aerial Design Option, selected as the LPA by both boards, would not displace the nursery school.

134. GOMERY, JANE

- 134.1. We feel BART to the airport is not a realistic option since we currently have a CalTrain line that serves San Mateo, Santa Clara, and San Francisco counties....We recommend the TSM alternative be studied further with CalTrain as the link to the airport. The cost and analysis for this option should be studied in more detail in the Final EIR.

**Response.** CalTrain serves the Peninsula but is not connected directly to the airport. In addition, BART and CalTrain lack a convenient transfer point. Only the proposed BART extension would meet these needs. Please refer to Response 9.1 for a discussion of the status of studies concerning the extension of CalTrain into San Francisco. As discussed in Response 2.7, the selection of the Alternative VI Aerial Design Option LPA does not preclude any CalTrain improvements. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18. The TSM Alternative has been analyzed to the same degree as the Alternative VI Aerial Design Option LPA and the other alternatives in the DEIR/SDEIS.

- 134.2. In reviewing the EIR alternatives we noted that there was no review of traffic impacts in Burlingame. We request a detailed look at Trousdale Drive, El Camino, Broadway, Rollins Road, California Drive, Hillside Drive, and Ray Drive.

**Response.** The analysis of traffic impacts in the City of Burlingame included local intersections involving Trousdale Drive, El Camino Real, Broadway, Rollins Road, and California Drive. Intersections that include Hillside Drive and Ray Drive were not analyzed in the DEIR/SDEIS because the only BART-related traffic on these roadways would be local residents driving to BART. While Hillside Drive does connect Skyline Drive to El Camino Real, drivers from I-280 cannot easily access the Millbrae Avenue Station via Hillside Drive which is south of the Trousdale Exit from I-280. Please refer to Response 14.39 for further discussion on the analysis of intersections involving all of these roadways except for Hillside Drive and Ray Drive.

134.3. How will the hospital and police station, elementary and intermediate schools be impacted? Alternative VI with the end of the BART line occurring at Millbrae at Millbrae Avenue, and a parking structure for 3,000 cars, will create a large impact in our community. This has not been addressed in the EIR.

**Response.** The following list provides a summary of where the DEIR/Technical Appendix considers the effects of the Millbrae Avenue Station on Burlingame:

- Page 3.1-89 indicates that nine intersections in Millbrae and Burlingame in the vicinity of the Millbrae Avenue Station were investigated;
- Impact 2 on page 3.1-184 acknowledges that spillover parking demand may reduce on-street parking on nearby streets;
- Impact 11 on page 3.2-54 notes that the land uses in the industrial and commercial areas in northern Burlingame may intensify in response to the Millbrae Avenue Station;
- Impact 19 on page 3.3-90 considers the visual effect of the BART tailtracks and emergency inspection pit;
- Page 3.5-28 discusses why BART is not expected to adversely affect Burlingame public services or utilities; and
- Impact 13 on page 3.9-85 explains why noise and vibration impacts are not anticipated.

For additional details, the commentor is referred to responses to the City of Burlingame's letter (Comment Letter 14).

134.4. Alternative VI does not address land use impacts on the community in Burlingame. There is little or no discussion of what [impacts] a station at the end of the line along the border of Burlingame will have [on] our community.

**Response.** The area around Peninsula Hospital near the end of the alignment is fairly densely developed, with retail commercial, medical office buildings, and convalescent/retirement housing as the predominate uses. There are few opportunities for land use intensification. However, the industrial area east of the right-of-way could be redeveloped at greater intensity. Please refer to page 3.2-54 of the DEIR/Technical Appendix for further discussion on the anticipated impacts on Burlingame land.

134.5. How is CalTrain to have continuous service without interruption during construction of the BART line? This is not addressed and is crucial to the continuing flow of commuters along the peninsula.

**Response.** Please refer to Response 11.3 for a discussion of CalTrain Service during construction of the BART extension.

134.6. All the options create levels of service along Highway 101 at unacceptable standards. Why are we spending all this money when we will still have the same problem?

**Response.** Traffic related to the BART extension will increase south of the SFIA and will decrease north of the SFIA in all BART build alternatives. The maximum additions are 900 northbound vehicles under Alternative VI and the Alternative VI Aerial Design Option in the A.M. peak hour and 500 southbound vehicles under Alternative IV in the P.M. peak hour. Vehicle reductions on Highway 101 north of the SFIA would have the greatest benefit in San Francisco, where traffic congestion occurs on this highway.

134.7. Parking impacts in Burlingame are not addressed with Alternative VI. What is the on-street parking demand for patrons intending to ride BART on the local streets and neighborhoods? Isn't this significant for the adjacent communities?

**Response.** Please refer to Responses 14.25 and 14.38 for a discussion of monitoring and mitigation of spillover parking on to local streets.

134.8. What about the impacts on SamTrans local bus routes and service districts. How will any of the alternatives affect the existing systems?

**Response.** The differences in SamTrans bus service among the BART build alternatives would be minor and typically held constant. Please refer to Response 14.29 for a discussion of the changes made in modeling assumptions for SamTrans bus service under the BART build alternative compared to the No Build Alternative.

134.9. We do not feel that crime issues have been addressed with the alternatives. Will the stations create more crime in the neighborhoods surrounding the stations. How will this be dealt with and will the individual communities have to pay for the extra law enforcement?

**Response.** The commentor's remarks concerning neighborhood safety impacts resulting from the proposed BART extension are acknowledged. Please refer to Responses 14.57, 16.2, and 16.7 for a summary of the security concerns presented in the DEIR/SDEIS and the proposed mitigation measures.

134.10. What about the particulate matter that will be created during construction? Isn't this air pollution and doesn't it reflect on the Bay [Area Air Quality Management District] standards.

**Response.** Federal and California ambient air quality standards apply to pollutant concentrations, rather than emissions. Emissions of particulate matter ( $PM_{10}$ ) during BART construction activities are compared to significance criteria adapted from Bay Area Air Quality Management District (BAAQMD) guidance. These significance criteria are presented in the DEIR/Technical Appendix, page 3.10-9 (project impacts) and 3.13-197 (construction impacts).

As described on page 3.13-198 of the DEIR/Technical Appendix,  $PM_{10}$  emissions from project construction are considered significant because they will exceed the total mass emissions threshold of 1 ton per year, and because  $PM_{10}$  emissions may cause temporary localized exceedances of state or federal  $PM_{10}$  air quality standards.

## 135. GONZALES, PATRICIA

135.1. The only acceptable BART route is Alternative VI.

**Response.** The commentor's support for Alternative VI is noted. The BART and SamTrans boards have selected Alternative VI as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process.

## 136. GREEN, C.

136.1. I do not want BART in SSF, especially the Chestnut Station. If it has to come, underground would be best, at any station, but Chestnut.

**Response.** The commentor's opposition to a Chestnut Station and preference for a subway configuration is noted. Under the new LPA, selected by the BART and SamTrans boards in

November 1995, there would be no Chestnut Station; the BART line would have a subway configuration through most of South San Francisco. Please refer to Response 2.7 for a discussion of the LPA selection process.

137. GREGORY, SYLVIA M.

- 137.1. The DEIR/SDEIS is slanted just for BART into the Airport and not for a total study of the transportation system to serve the airport...[and all] Peninsula traffic. The study should include the needs of the workers at the Airport who must commute each day to the terminal area as well as the United Maintenance Base. Many of these workers come from south of the airport and need to be accommodated.

**Response.** All alternatives, including the No Build Alternative, TSM Alternative, and BART build alternatives, were analyzed to the same thorough degree whether they included an internal station at the SFIA or external station to the SFIA. The needs of SFIA workers who live to the north or the south of the airport were considered in the design of the various BART build alternatives. Airport workers who live to the south of the airport would transfer to the ALRS or BART to access the SFIA.

- 137.2. Why does [the Summary DEIR/SDEIS] ignore the impact...[that] the extension of CalTrain into Market Street [has on BART]? Or include a true study of the economic effect of that extension on the passenger numbers and the income numbers of the two systems?

**Response.** Please refer to Response 11.6 for a discussion of transportation-related impacts to the BART extension with the CalTrain downtown extension.

In addition, please refer also to Response 14.92 for a discussion of why a complete analysis of the CalTrain extension to downtown San Francisco is not included in the DEIR/SDEIS. Ridership information on the BART LPA and CalTrain extensions are provided in the FRDEIR/S#2DEIS in the Transportation section. Complete information on ridership and revenues for the CalTrain downtown extension can be found in the environmental documents pertaining to that project.

- 137.3. Alternative VI will require northbound CalTrain riders to [disembark] at Millbrae, wait for BART to take them into the new International Terminal at the Airport, get off BART and then wait for the Airport/People-mover to get them to the domestic terminals or to work. Is this an efficient design for a railroad interface?

**Response.** Please refer to Responses 11.1 and 242.6 for a discussion of CalTrain riders' access to the SFIA under Alternative VI.

- 137.4. The best way to get people on BART to the airport, and to provide better transit for the people south of the airport, is to connect CalTrain to the airport people-mover and extend CalTrain into downtown San Francisco to connect with BART.

**Response.** The commentator's opposition to the TSM Alternative is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process). As discussed in Response 2.7, the selection of the Aerial Design Option LPA does not preclude any CalTrain improvements, including extension to downtown San Francisco.

- 137.5. This DEIR should compare the costs and ridership of the BART-SFO extension with the CalTrain extension results instead of projecting that BART will 'steal' 19,000 riders from CalTrain at the Millbrae interface.

**Response.** Transfers between transit systems, as forecasted by the MTC mode choice model, do not steal from one system to give to the other, but rather provide opportunities for improved transit service. Please refer to Responses 11.6, 79.14 and 137.2 for a discussion of transportation impacts related to the BART extension and the downtown CalTrain extension.

- 137.6. Will SamTrans be able to afford this tremendous cost? An in-depth study of these figures would show that the BART extension would be a heavy drain on San Mateo County taxpayers! Will SamTrans be able to underwrite this cost as well as support a well designed and integrated transit system of CalTrain and feeder buses on the Peninsula?

**Response.** Please refer to Response 10.1 for a discussion of SamTrans' participation in the project.

138. GULLMES, SHERLEY

- 138.1. I am definitely opposed to BART in Burlingame and upset with...[an] increase in traffic conditions [that would be caused by] extending California Drive, as well as every other aspect of having BART here.

**Response.** The commentor's concerns have been noted. Please refer to Response 2.7 for discussion of the proposed project and the process through which alternatives were evaluated.

139. HERLIHY, JAMES A.

- 139.1. The proposed plans of B[ART] Route passing by the 380 Highway...begins at my property line. I believe this will destroy the quietness of my neighborhood and devalue our homes rendering the[m] useless to owners and occupants....If BART destroys that value, who will be liable for the damage?

**Response.** There is no evidence to indicate a decline in property values as a result of a BART project. Please see Response 16.73 for a discussion of property values around BART.

140. HENRY HORN & SONS INSURANCE

- 140.1. The TSM Alternative is the only option that makes sense, economically.

**Response.** The commentor's support for the TSM Alternative is noted. The BART and SamTrans boards have selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process and the implications for CalTrain improvements.

141. HILLS, ERNEST H.

- 141.1. I fully support the BART extension from Daly City to the San Francisco International Airport but at a reasonable cost.

**Response.** The commentor's support for a BART extension to the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option. Please refer to Response 2.7 for a discussion of the LPA selection process. The LPA includes a direct BART line to the airport.

141.2. When BART was built in Berkeley the local electorate approved, on October 4, 1966, a bonded indebtedness to pay for the difference in cost between an "elevated" and a "subway" line. A similar method of local payment should apply to this extension project....My concern is that a portion of the construction here in San Mateo County has already been unilaterally upgraded by building the tailtrack past the new Colma station to a "retained cut" specification. Again, this sort of upgrade should be financed by the locality that desires the upgrade.

**Response.** Please refer to Response 19.21 for a discussion of the role of cities in funding the project.

141.3. Construction must be above the flood plain and not below it to avoid problems. I recommend that the line south of the Holy Cross/Mission Road crossing should be built with a low fenced structure (as shown on page 92 cut section P or on page 94 cut section AA from the documents for this hearing).

**Response.** A subway alignment in this area was selected for the new LPA based on the benefits in the categories of no visual obstructions, no change to surface land use, and no interference to traffic at cross streets. Please refer to Responses 15.4 and 25.4 for a discussion of flood control and drainage improvements for the proposed BART alignment south of Holy Cross Cemetery/Mission Road.

141.4. The City of San Francisco's former 10-mile right-of-way from Colma to Burlingame should be transferred for a fair market price to the San Mateo County Transit District to be used for transportation needs....This would nearly double the width of the project right-of-way and would have major advantages for construction and operation.

**Response.** SamTrans and BART staff have initiated discussions with the City and County of San Francisco regarding the disposition and utilization of this abandoned rail corridor for the proposed project. It would provide valuable right-of-way, as noted by the commentor.

141.5. The proposed underground Hickey Station (beneath the Colma flood plain) site is a poor location that is not near the midway from Colma and San Bruno and only serves 22 percent of the potential ridership in South San Francisco. An aerial Chestnut station would serve 63 percent of the city's residents and the Kaiser Hospital, the busiest travel point in the city. An aerial line south should have its height kept to a minimum. This results in estimated savings of nearly \$80 million.

**Response.** During preparation of the AA/DEIS/DEIR, the City of South San Francisco requested that the Hickey Station be examined as part of the Alternatives Analysis Study. The South San Francisco City Council supports the Hickey Station and opposes the Chestnut Station.

The proposed Chestnut and Hickey Stations would function primarily as local catchment stations, attracting patrons primarily from South San Francisco, and to a lesser extent from Pacifica and areas west of I-280. The MTC patronage forecasts do not show significant patronage and parking demand differences between the two stations. As shown in Table 3.1-9 of the DEIR/Technical Appendix, the MTC modeled daily patronage demand in 2010 for the Alternative III Chestnut Station would be 6,300. The same MTC model predicted 8,400 for the Hickey Station under the other BART build alternatives. As shown in Table 3.1-95 of the DEIR/Technical Appendix, the MTC year 2010 modeled parking demand would be 1,140 spaces for the Chestnut Station, and between 1,010 and 1,200 spaces for the Hickey Station. The selection of Hickey Station vs. Chestnut Station for South San Francisco will be based on a number of factors, including proximity to major users, availability of real estate, impact on existing roadways and intersections, and long range development plans for the neighborhood.

An aerial alignment has not been proposed for this segment of the Project. The MTC Policy Committee and EIR/EIS Steering Committee directed that alternatives for this segment be limited to subway and retained cut options.

- 141.6. Just south of I-380 will be the first interconnection between BART and CalTrain. This is the best location for an intermodal station to serve the community. With Tanforan Shopping Center, downtown San Bruno and the United Airlines Maintenance Base (the largest employer in San Mateo county) this station should have a parking capacity for at least 4000 cars....This location would permit a CalTrain grade separation above and a BART station section below San Bruno Avenue 1100 feet to the south. To maintain existing community parking along the right-of-way the BART line must be built with open cut construction for 2 miles from Sneath Lane, south to a point just south of Belle Air neighborhood.

**Response.** All of the BART build alternatives have a BART/CalTrain Station intermodal station. A screening criterion (please refer to page 2-107 of the DEIR/Technical Appendix) and one of the underlying assumptions used to define all of the BART build alternatives screening criteria is that the BART extension must provide a BART/CalTrain intermodal transfer. The ability to transfer between BART and CalTrain improves the regional transit system, provides additional mobility for transit dependents and provides transit access to the region for people of San Mateo.

The commentor is proposing a BART/CalTrain Station just south of I-380 in San Bruno. This alternative would likely have the following effects: 1) opposition from the Fifth Addition and Belle Air neighborhoods, which have opposed an approximately 4,000 parking space transit station in the vicinity of Tanforan; and 2) this alternative that would not meet the objective of getting passengers and airport employees close to the Airport terminals.

- 141.7. The exterior San Francisco Airport Intermodal Station...should be located to minimize travel time for an airline passenger from the station to the SFO terminal. It should be located as far south as possible but still permit the BART line to make a 75° curved tailtrack and a leave space for a future underground entrance for a future BART SFO interior station.

**Response.** The current location for the external airport station west of Highway 101 does not permit adding trackwork to provide underground access to an internal airport station. It would be possible, however, to provide a mainline bypass to Millbrae Avenue with provisions for tunneling into the airport terminal area. It is not clear what benefit would be obtained with an external station in combination with an internal station. Any external station requires added travel times for patrons accessing the airline terminals, as compared to an internal station.

Tailtrack facilities on a 75-degree turn violate BART Design Criteria. The BART alignment under the 1992 LPA and Alternative III in the vicinity of the Airport Intermodal Station is at grade. A tailtrack that curves southeast, as proposed by the commentor, would cross endangered species habitat on the SFIA west of Bayshore parcel at-grade. The at-grade BART alignment on the SFIA west of Bayshore parcel contains wetlands and habitat of the San Francisco garter snake, an endangered species. In its comments on the DEIR/SDEIS, the California State Department of Fish and Game notes that the most significant impacts associated with the proposed project would result from the development of an intermodal station on the SFIA west of Bayshore parcel. An at-grade BART alignment through the wetlands and sensitive species habitat would have significant impacts.

The Alternative VI Aerial Design Option provides for an intermodal station at Millbrae and an aerial wye entry into the San Francisco International Airport.

- 141.8. The interior San Francisco Airport Intermodal Station....is a natural site to terminate some BART routes. When CalTrain becomes an express service the local non-rush BART service to the south could be handled by reverse direction operation. BART rush period service would bypass the interior SFO station.

**Response.** The commentor is proposing that, in addition to the Alternative VI tunnel alignment into and out of the Airport to Millbrae, BART provide straight-through mainline service adjacent to CalTrain between Millbrae and San Bruno, and that CalTrain provide express service during peak travel periods. Under this scenario, during the morning peak period, southbound BART train service could terminate at SFIA station and CalTrain could handle the reverse commute service to Millbrae. BART A.M. peak-period northbound rush service could bypass the interior SFIA station and provide service instead on the straight-through mainline.

Certain elements of this proposal, including both service to the Airport and straight-through mainline service between Millbrae and San Francisco, are incorporated in the Aerial Design Option LPA. In addition, as described in the FRDEIR/S#2DEIS, Section 2.1, Project Description, under the Aerial Design Option LPA, BART would operate two trains during peak periods to serve the Millbrae Station for every one serving the airport. Under this operating plan, the BART trains to the Airport would reverse direction and return to San Francisco and the East Bay.

The commentor's suggestion that southbound BART train service could terminate at the SFIA is not feasible. Terminating at the SFIA station would require an underground yard to store trains. This would require significantly greater excavation and costs at the airport to construct the subway yard.

#### 142. HIZAZI, HELENA W.

- 142.1. I would not like to run BART through Huntington near Sylvan Avenue....I feel the traffic through Huntington would be too much noise and vibration.

**Response.** Neither noise nor vibration impacts would occur along Huntington near Sylvan Avenue under the 1992 LPA, I-380 Least-Cost Design Option, Alternative IV, or Design Option V-B. Under Alternatives III, V, Design Option V-A, Alternative VI, and the Aerial Design Option LPA, the alignment would run parallel to Huntington Avenue near Sylvan Avenue and generate noise and/or vibration impacts. However, mitigation is proposed in each case that would reduce noise and vibration impacts to sensitive receptors to a less than significant level. Noise impacts along Huntington Avenue near Sylvan would be eliminated under the Aerial Design Option LPA with implementation of the proposed sound barrier wall.

#### 143. HOLESAPPLE, GEORGETTE

- 143.1. I am against BART. San Bruno, Millbrae, Burlingame and San Mateo areas are too congested to have a big...concrete monster and tracks.

**Response.** The commentor's general opposition to the BART extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option. Please refer to Response 2.7 for a discussion of the LPA selection process.

Significant traffic impacts were defined in the BART-San Francisco Airport Extension DEIR/SDEIS, and mitigation measures were either provided for these impacts or significant and unavoidable impacts are noted. Specific mitigation measures for significant impacts to intersections in the study area are described in the DEIR/Technical Appendix. For example, mitigation measures for significant impacts to local intersections under Alternative VI are described on pages 3.1-159 through 3.1-162 of the DEIR/Technical Appendix.

- 143.2. A big BART station will bring crime. Having Hillcrest Boulevard opened up with a r[oad] will increase crime...

**Response.** The commentor's remarks concerning neighborhood safety impacts resulting from the proposed BART extension are acknowledged. Please refer to Response 16.2 for a discussion of the security concerns presented in the DEIR/SDEIS and the proposed mitigation measures. The Hillcrest Boulevard underpass, as recommended under Alternative VI, makes the Bayside Manor neighborhood more accessible to the rest of Millbrae. This does not necessarily lead to a greater incidence of crime. It does, however, permit better access by emergency response vehicles, and could therefore reduce response times.

- 143.3. BART does not run 24 hours a day. What do airport passengers do [when BART is not running?]

**Response.** Please refer to Response 104.1 for a discussion of BART's service hours. Alternative forms of transportation (e.g., shuttles, taxis) are available 24 hours a day.

144. HORN FAMILY

- 144.1. We, the undersigned, are all in support of the TSM Alternative of the Draft EIR with regard to a BART extension to the San Francisco International Airport.

**Response.** The commentor's support for the TSM Alternative is noted. The BART and SamTrans boards have selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process and the implications for CalTrain improvements.

145. HORN, STAN

- 145.1. Citizens overwhelmingly voted for Bart into the Airport. In a second proposition, they voted overwhelmingly against a remote station.

**Response.** The commentor's support for a BART extension to the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option. Please refer to Response 2.7 for a discussion of the LPA selection process. The LPA includes a direct BART line into the airport.

146. HUENING, TOM

- 146.1. In conjunction with the development of the BART extension into San Mateo County, I believe there is an extraordinary opportunity to build a first class bicycle and pedestrian path at grade above BART's cut-and-cover subway and along the CalTrain right-of-way. This path could begin immediately north of BART's Hickey Station at Mission Boulevard in South San Francisco, proceed southward over the BART extension as far as the Tanforan Station and then follow alongside the CalTrain tracks as far south as Burlingame.

**Response.** Once the cut-and-cover subway construction is completed, the surface area would be returned to its natural state of native grasses and other plant types found in the immediate area. The only exceptions to returning the right-of-way to its original conditions are at locations where access and ventilation shafts project above grade, approximately at 3,000-foot intervals. Free access would be provided across the right-of-way. BART is entertaining the concept of a bicycle path above BART's subway from Mission Road to the proposed Millbrae Station, where right-of-way is available. The BART project would not acquire rights-of-way or provide for continuation of a bicycle path on property not proposed for a BART alignment. BART and SamTrans will take the lead in design, planning and environmental clearance of a bike path. BART proposes a Joint Powers Authority, including BART and other local agencies, to coordinate issues. If the path is approved, BART would entertain incorporation of the bicycle path into the construction of the

BART extension on portions of the route owned by BART and as funding is available. The other agencies would need to accept responsibility for maintaining the bicycle path after construction.

In general, BART supports the concept of bike and other non-auto modes of access to BART stations. Therefore, use of available right-of-way by local jurisdictions for a bikeway would be encouraged and, during BART construction, efforts would be made to facilitate this use wherever possible.

Please refer to Response 19.27 for additional discussion of the proposed bicycle path.

#### 147. JARMAN, JEANNE

- 147.1. I would like to go on record as opposing the extension of BART any further south than Daly City....I believe it to be an incredible waste of money to extend BART into an area where there are already existing railroad tracks. I believe the most economical option is to upgrade the current rail system and extend it to the airport or offer an extension to the airport by another means in a convenient, expeditious manner.

**Response.** The commentor's opposition to all of the build alternatives is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. As noted in Response 2.7, the Alternative VI Aerial Design Option was selected as the LPA by both boards. Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18. As noted in Response 2.7, the BART extension does not preclude improvements to CalTrain.

- 147.2. With regard to the underground tunnel...I tend to think it would not serve our purposes in earthquake preparedness. Much of the area in question is situated on landfill and, while I'm no expert, I would certainly believe having an underground tunnel would only increase the instability of the area.

**Response.** The underground tunnel would be located at a depth of 30 feet below ground surface in firm alluvial soil. The tunnel would be well below any landfill or other weak soil, and would not contribute to any instability in the area.

#### 148. JEWEL CROSS, NANCY

- 148.1. What alternatives, as distinguished from "no build BART," exist for addressing the purposes above defined for any investment, and what are the researched benefits and costs? For example, nowhere in the document put up for public hearing is disclosure...of the cost in time and money of ground access to the airport on a per trip basis to the user! How can anything be a basis for informed public reaction...without disclosure thereof? And includ[ed] in the alternatives [is the] use of Muni Metro Rail to connect...BART and CalTrain in San Francisco instead of at the airport? And a bicycle garage for local access to the airport who would not be coming by train?

**Response.** The federal cost effectiveness index for the alternatives under consideration is displayed in Table 6-10 of both the DEIR/SDEIS and DEIR/Technical Appendix. As shown in Table 6-10, the cost effectiveness per new transit rider varies between \$19.85 and \$29.57. The costs of auto access to the airport, in both time and money, is not addressed in the DEIR/SDEIS because it is neither a fixed guideway alternative, nor an alternative under study.

All of the alternatives under study in the DEIR/SDEIS include the Muni Metro Extension from the foot of Market Street to 16th Street as part of the background transportation improvements

included in MTC's transportation modeling process. The Muni Metro would serve the existing San Francisco CalTrain terminus station at Fourth and Townsend along that route.

A CalTrain station connected to the SFIA by the Airport Light Rail System on Airport property west of Highway 101 with parking for 160 vehicles is part of the TSM Alternative. The TSM Alternative, however, did not include a garage for bicycles. Overall bike access to BART suburban stations is approximately one percent, and a bike garage with a capacity in excess of one to two percent is inappropriate. Bike lockers can be rented, and bike racks are available at most CalTrain and BART Stations.

- 148.2. What are the transportation system and air quality and ambiance impacts, regionwide, of the various alternatives? Including use of the South Bay/Dumbarton Bridge and Routes 280, 237, and 101?

**Response.** The transportation and air quality impacts of the project alternatives are described in detail in Sections 3.1 and 3.10 of the DEIR/Technical Appendix, respectively. The regional transportation and air quality analyses are based on the regional transportation model developed by MTC, which encompasses the Dumbarton Bridge and Routes 280, 237 and 101.

The BART extension would not affect the Dumbarton Bridge because few, if any, individuals would use this bridge to access a BART station. The BART extension would also not affect traffic on State Route 237 because of its distance from this project, and few drivers are expected to use this facility to access a BART station. Traffic impacts to Highway 101 were thoroughly analyzed in the DEIR/Technical Appendix and summary tables outlining these impacts include Table 3.1-72, Freeway Level of Service - 1993, Table 3.1-74, Freeway Level of Service - 1988, and Table 3.1-76, Freeway Level of Service - 2010, in the Transportation section of the DEIR/Technical Appendix. Interstate 280 was included in the study area for the BART extension, and many of the responses in this volume address issues concerning I-280. Please refer to Response 10.25 for a discussion of the Tanforan Station, Response 15.1 for a discussion of traffic impacts, Response 16.9 for a discussion of the Hickey Station, and Response 66.251 for a discussion of the Colma Station.

Regional vehicle-miles-traveled (VMT) data are predicted to vary less than 1 percent between 14 different BART model runs, and are therefore assumed equivalent for purposes of the air quality analysis. The regional VMT data and the associated pollutant emissions under the project, TSM Alternative, and No Build Alternative are summarized in Table 3.10-5. The proposed project would result in a decrease in regional VMT and associated pollutant emissions compared with the No Build Alternative.

- 148.3. At the March 4, 1995 hearing, one white male speaker, a senior, envisaged great popularity of BART to seniors for access from San Mateo County on the basis of his experience driving a car to Daly City to catch BART to attend opera in San Francisco. He said he enjoyed the outing immensely. He did not give thought to the long escalator and stairs...at other BART stations significant to the less mobile, senior and otherwise, and long walks to elevators, and package-, baggage-, children- and babies-encumbered.

**Response.** All BART stations proposed for the SFIA Extension would be fully accessible to the handicapped through provision of elevators and specially designated routes for the vision and hearing impaired patrons. The walking distances for less mobile and senior users are no longer than those provided for unencumbered riders.

- 148.4. Seniors more frequently than persons of middle years[,] especially white men[,] would access a train by bus rather than car to be parked there. B[ART] selectively serves people of higher income who enjoy the freebie of car storage at B[ART] stations for their car at public expense instead of paying parking fees in San Francisco to attend the opera.

**Response.** BART currently offers nearly 34,000 parking spaces at 24 of the 34 stations. Parking spaces are free, except at the Lake Merritt Station where a 25 cent parking fee is charged. BART does not selectively provide free parking to persons of higher income. BART parking spaces are available to any BART patron on a first-come, first-serve basis.

- 148.5. Informed opinion gives consensus for [a] CalTrain Airport Station, no more B[ART] in San Mateo County, no CalTrain extension to San Francisco, Yes on [a] Muni Metro Rail extension connecting CalTrain and B[ART] in San Francisco, and user-free use of luggage carriers at San Francisco International Airport.

**Response.** The commentor's opposition to all of the build alternatives is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. As noted in Response 2.7, the Alternative VI Aerial Design Option was selected as the LPA by both boards. Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are discussed in Response 79.18. As noted in Response 2.7, the BART extension does not preclude improvements to CalTrain, including bringing CalTrain into downtown San Francisco.

#### 149. JOHNSON, NEAL

- 149.1. Alternative VI best meets the goals and objectives put forth in Table 1-2 of the Summary DEIR/SDEIS...with the exception of Goal 4 (Financial) objectives.

**Response.** The commentor's support for Alternative VI is noted. The BART and SamTrans boards have selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process. Response 14.7 analyzes each of the alternatives against the goals in Table 1-2 of the Summary DEIR/SDEIS. As noted in that response, Alternative VI (as originally proposed) would "adequately" satisfy Goal 4 (Financial Feasibility).

- 149.2. The freeway ramps expected to be built to provide access to an external airport station...are not reflected in cost estimates. Also, the [\$]44 million estimate for the ALRS does not fully cover the additional cost of connecting to westside stations. The cost of these two items could easily exceed 150 million dollars.

**Response.** The costs of freeway ramps that would provide access to a station located west of Highway 101 are included in project cost estimates. The cost of the ALRS connection to a station west of Highway 101, estimated at \$44 million, is a cost to be borne exclusively by SFIA, and is not included in other project costs. This amount is shown in Table 6-1 of the DEIR/SDEIS under "Costs Covered by Others."

- 149.3. Figure 2 taken from the Design Appendix [on] page 79, shows..."Relief Tracks" shown in a subway and causing the vertical profile of the main line subway to be split. This feature is not included on any other alternatives, and does not appear to be necessary. Also, Figure 3, taken from the Design Appendix page 136, shows an excavation of more than 50 feet for the airport station. Figure 4 shows how the station could be configured so that an excavation need only be slightly more than 20 feet deep. This might allow for more of the subway construction on airport property to be cut-and-cover. These revisions to Alternative VI would conservatively save 50 million dollars.

**Response.** It is the policy of SFIA that no cut-and-cover line construction be permitted on aircraft operations areas or through roadways. Please refer to Volume I of this FEIR/FEIS for a description and analysis of Alternative VI Aerial Design Option, which has been selected as the LPA.

149.4. With these changes reflected, Alternatives V and VI would cost 1,052 million and 1,219 million. [Alternative] V's cost per mile would be 152.5 million & [Alternative] VI's would be 152.4 million. So you can see that Alternative VI is the cost effective choice.

**Response.** The savings proposed by the commentor are believed to be unachievable because of design and construction constraints. Specifically, cut-and-cover construction is not permissible on SFIA aircraft operations areas or through active roadways because of the possibility of operations disruptions.

150. JOSEPH, DIANE

150.1. I am writing on behalf of Millbrae Nursery School....It would be a great error to close down this valuable educational school.

**Response.** The Millbrae Nursery School would be displaced only under Alternatives IV and V, as well as under Design Options V-A and V-B. These and other impacts were considered by the BART and SamTrans boards during the LPA selection process in November 1995. Please refer to Response 2.7. The Alternative VI Aerial Design Option selected as the LPA by both boards would not displace the nursery school.

151. KAISER PERMANENTE

151.1. Overall the extension of BART will be an asset to the community and will help in meeting goals to reduce traffic.

**Response.** The commentor's support for a BART extension to the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option. Please refer to Response 2.7 for a discussion of the LPA selection process.

151.2. The parking supply of 1,100 spaces in the current design of the Chestnut Station does not meet the projected demand of 1,400 spaces. (page 3.1-26 [of the Summary DEIR/SDEIS]) We strongly support the inclusion of the proposed mitigation measure to add 100 spaces on BART property, bringing the total available to 1,200 spaces, which would theoretically meet the estimated demand. (page [3.1]-26) This is essential to avoid spillover parking demand into the adjacent Kaiser parking facility (which would create a shortage for Kaiser patients and staff).

**Response.** Under the Base Case alternative, parking demand at the Chestnut Station is 1,140 and the proposed parking supply is 1,200, indicating enough supply to accommodate demand. Additionally, please refer to Responses 14.25 and 14.38 for a discussion of monitoring and mitigation of spillover parking into local streets.

151.3. The impacts attributable to the BART extension at Chestnut and Grand would result in a PM peak hour decrease in LOS from D to E if the proposed project or alternatives IV or V were implemented. (page 3.1-24 [of the Summary DEIR/SDEIS]) The proposed mitigation states that the implementation of improvements will improve the LOS to C under Alternatives IV and V, but does not mention what will happen under the proposed project. (page 3.1-25 [of the Summary DEIR/SDEIS])

**Response.** The statement on page 3.1-25, Mitigation Measure 4, last sentence of the DEIR/SDEIS, referred to by the commentor is incomplete. Please refer to Mitigation Measure 5.2 on page 3.1-125 of the DEIR/Technical Appendix for a description of the proposed improvement under the 1992 LPA.

- 151.4. The proposed mitigation states only generally that the density of trees planted by BART (mature height 30-40 feet) will be sufficient to buffer nearby residences and provide additional screening from parking lot lights. (page 3.3-40 [of the Summary DEIR/SDEIS]) This does not address whether the trees will shield light and glare coming from the station (and not just the tracks) especially to upper floor patients. At the same time, the EIR does not state how long it will take for the trees to reach maturity, and how significant the impact will be in the meanwhile, or even after mitigation regarding hospitalized patients on upper floors.
- Response.** Mitigation Measure 11, Station Lighting Fixtures, on page 3.3-40 of the DEIR/SDEIS states that light/fixtures would be fitted with lenses, hoods, and reflectors to minimize spillover light and glare into adjacent residences. Please refer to Response 72.213 for a discussion of the length of time it would take for trees to reach maturity.
- 151.5. The cumulative analysis states that cumulative development is projected to result in potentially significant impacts to wastewater treatment services, but that they cannot be determined until a load test is performed when the current plant modifications are completed. (page 3.5-16 [of the Summary DEIR/SDEIS]) What mitigation measures will be implemented to address this issue, especially in light of other potential development in the area?
- Response.** Page 3.5-16 of the DEIR/SDEIS states that wastewater treatment plant capacity may need to be augmented to satisfy the demand from cumulative development. Before taking such capital-intensive measures, the cities could implement water conservation measures, ration connections, or plant modifications to increase capacity. Furthermore, the City of South San Francisco is in the initial phase of re-evaluating the facility's wastewater capacity and current flows. As a result, references to the facility's capacities and flows in the DEIR/SDEIS will be unknown until this re-evaluation is complete and accurate figures are available. The re-evaluation is scheduled to be finished in November 1995 (Castignola, 1995).
- 151.6. The determination as to what mitigation measures will be implemented sounds quite vague. Also, please confirm that this conclusion of insignificance remains the case for all stories in a multi-story building, such as Kaiser's, and that there are not special vibrational factors in effect for multi-story buildings which might not be mitigated.
- Response.** The mitigation identified in the DEIR/SDEIS for noise and vibration impacts related to Kaiser Permanente Medical Center are as specific as possible given currently available data. For the retained-cut alignment (Alternative III - Base Case), a soundwall would not be necessary, even for the upper floor levels. Vibration level calculations will be refined in preliminary design using data from tests performed to determine local soil conditions in the vicinity of the Medical Center. Groundborne vibration transmitted from nearby transit systems has been shown to attenuate (lessen) as it moves upward through larger buildings into higher stories. The highest levels of vibration are found at the ground and basement levels of the buildings.
- 151.7. Under the Airborne Noise analysis, there is no mention of airborne noise impact at the Kaiser Medical Center, although the EIR states that the Base Case Alternative affects 81 to 93 receptors in South San Francisco. (page 3.9-15 [of the Summary DEIR/SDEIS]) Please consider the significant impact on the Medical Center.
- Response.** There would be no significant airborne noise impacts at Kaiser Medical Center. The 81 to 93 receptors referred to in the DEIR/SDEIS are at locations other than Kaiser Medical Center.
- 151.8. The EIR does not clearly indicate whether the airborne noise measurements include the operational sounds of a train approaching a station and the horn sounding. This could affect the Medical Center if a station were built at Chestnut, and were either at grade or [in] retained cut.

**Response.** Train operational noise was evaluated, and train horn noise is expected to be less than 70 dBA at the Medical Center, and thus would not be considered a significant impact. See Table 3.9-2 of the Summary DEIR/SDEIS, page 3.9-5. Please also refer to Response 151.9 for a discussion of vibration mitigation with respect to Kaiser Medical Center.

- 151.9. Because Kaiser is classified generally as a “sensitive receptor” and specifically as a “special zone” under the Noise and Vibration analysis, we think extensive, advance consultation and coordination with us is essential. This need for particular consultation and coordination has not been sufficiently emphasized in the DEIR.

**Response.** Advance consultation with Kaiser Medical Center and coordination between Kaiser Medical Center and BART has been established. Specific evaluation of the effects of operational noise and vibration from BART trains is ongoing and further coordination is expected to appraise Kaiser of these effects. Vibration criteria for sensitive equipment are documented in manufacturer’s manuals. Using these criteria it has been determined that vibrations caused by BART trains can be mitigated. During construction, vibration response mechanisms are typically installed to record ambient and construction vibrations. If ambient vibration levels or vibration criteria, whichever the greater, are exceeded, the contractor will be required to perform construction work at times mutually agreeable to both parties. Please refer to Response 151.7 for an additional discussion of noise impacts.

- 151.10. In the DEIR/Technical [Appendix] (page 3.13-34), it is unclear whether Orange Avenue would be completely closed for one month, or each of the two lanes on Orange Avenue would be closed for one month each. Please clarify.

**Response.** Orange Avenue would remain open during the construction period. The two lanes would be detoured for one month while decking is installed on the current alignment. In addition, advance consultation with Kaiser Medical Center and coordination between Kaiser Medical Center and BART has been established. Specific evaluation of the effects of operational noise and vibration from BART trains is ongoing and further coordination is expected to appraise Kaiser of these effects. Please refer to Response 151.9 for a more detailed discussion of this topic.

- 151.11. During construction, the BART extension would disrupt various neighborhoods by generating noise, dust, changes to traffic and pedestrian patterns, visual impacts, and potential safety hazards. (This specifically includes Sunshine Gardens, near the Kaiser Center, which is indicated as “heavily impacted.”) The listed mitigation measures do not specifically include coordination with Kaiser, and we believe that this should be included. (page 3.13-10 [of the Summary DEIR/SDEIS])

**Response.** Mitigation Measure 1.1 on page 3.13-10 of the DEIR/SDEIS is intended to be an inclusive statement and, as such, includes Kaiser Permanente.

- 151.12. Construction of the BART extension would potentially delay response times for local police, fire and emergency medical service providers. (page 3.13-16 [of the Summary DEIR/SDEIS]) Can this very adverse impact be mitigated? Also, again, the mitigation measures should, but do not, include coordination with Kaiser.

**Response.** Please refer to Response 14.83 for measures to be implemented to avoid significant delays to emergency response vehicles during the construction period.

- 151.13. Construction of the BART extension may interrupt utility service by requiring the relocation or replacement of segments of utility lines. (page 3.13-17 [of the Summary DEIR/SDEIS]) Again, Kaiser would like specific and well-in-advance consultation. The interruption of utilities could be critical to the Medical Center and the lives of its patients.

**Response.** Kaiser Permanente was consulted in order to identify critical utilities prior to the start of final design. BART's contractor will be required to make suitable arrangements with Kaiser Permanente to minimize disruption of services according to criteria established jointly after consultation with Kaiser Permanente.

- 151.14. It is Kaiser's understanding that if any of the hospital's utilities require relocation, BART (as the project sponsor) would be responsible for design and construction of such relocation including coordination with Kaiser regarding disruption of service. Please confirm that our understanding is correct.

**Response.** BART is responsible for designing all utility relocations affected by construction, and for their restoration or replacement. Replacement services will be built to the same capacity as existing services. Please refer to Response 151.13 for a discussion of BART's arrangements and BART's contractor's arrangements with Kaiser Permanente.

- 151.15. Previous environmental documents for the project had shown a re-routing of the sanitary sewer line across the SF Water District easement, but this is not mentioned in the current documents. Has this re-routing been eliminated?

**Response.** All existing utilities would either be protected and supported in place during construction or reconstructed in sites that are protected from the new work.

- 151.16. The EIR acknowledges that "Kaiser Hospital is a unique land use and will be classified as a special zone with appropriate noise level and construction time restrictions to be defined and included in construction contract documents." (page 3.13-25 [of the Summary DEIR/SDEIS]) These critical mitigation measures should be developed now, when the public can meaningfully comment and influence the process.

**Response.** The DEIR/SDEIS recognizes Kaiser Medical Center as deserving of a special zone status during construction. Though not all critical mitigation measures can be developed at the current stage of design, BART would coordinate with Kaiser in the development of appropriate construction noise and vibration criteria. Please refer to Response 151.9 for a discussion of vibration criteria.

These mitigations would include construction time constraints, trackbed mitigations to limit ground borne vibrations, temporary soundwalls during construction, and construction traffic route restrictions.

- 151.17. The EIR indicates that if during final design Mitigation Measures 1.1 or 1.2 (pre-drilled piles and special hydraulic pile driver) are found to be infeasible, the impact would be significant and unavoidable. (page 3.13-25 [of the Summary DEIR/SDEIS]) This impact represents a significant disruption and interference with the delivery of medical care, particularly the recovery of hospitalized patients. Again,...advance[d] consultation with Kaiser is essential.

**Response.** Pile driving, whether impact or vibratory, would be coordinated with Kaiser. The proposed mitigation for this activity is to use either pre-drilled or static-load hydraulic methods. The selection of the method of pile driving to be used would be decided by BART. Please refer to Response 151.9 for a discussion of noise impacts. In addition, please refer to Response 19.11 for discussion of specific mitigation during preliminary engineering.

- 151.18. Because of the danger to patients and to hospital, air handling supply fans and filters and other equipment, Kaiser requests that the best construction practices be strictly enforced in the vicinity of the Medical Center, and that BART consider adopting stricter standards if there is to be a Chestnut Station or if the Chestnut Station site is to be used as [a] mobilization and laydown area.

**Response.** Please refer to Response 19.134 for a discussion of the measures that will be implemented to minimize the amount of particulate matter generated during construction. BART will require that construction contractors consistently implement all adopted mitigation measures. Please also refer to Response 105.14.

- 151.19. We have found no reference to the potential construction of a future Kaiser facility proposed to be built at Kaiser's 19-acre site at West Orange, Railroad Avenue and Spruce between 1996-1997. We are particularly concerned about possible conflicts in construction activities between the two projects, or the unnecessary compounding of construction impacts on the surrounding area. We request separate consultation on this issue, particularly regarding the timing of construction activities, closure of streets, planned utility relocation, etc.

**Response.** After certification of the project, and prior to construction, BART will be further developing construction scenarios and will seek to coordinate with Kaiser regarding construction activity in the area.

152. KAISER, MARINA

- 152.1. Will BART be working with CalTrain to coordinate the train grade separations?

**Response.** BART has been coordinating and will continue to coordinate with the San Mateo County Transportation Authority on CalTrain grade separation projects which interface with the proposed BART alternatives. A good example of this is the Millbrae Avenue grade separation over CalTrain and the proposed Millbrae Avenue Station under Alternative VI and its Aerial Design Option.

153. KAISER, MARINA

- 153.1. Alternatives V, V[-A], [and] V[-B] are the most destructive options for San Bruno. It makes no sense to even plan much less seriously consider placing an intermodal station in the heart of a small town.

**Response.** The commentor's opposition to Alternative V and Design Options V-A and V-B is noted. The impacts of these and other impacts were considered by the BART and SamTrans boards during the LPA selection process. The Alternative VI Aerial Design Option, which was selected by both boards in November 1995 (please refer to Response 2.7), does not include a downtown Millbrae intermodal station, although there would be an intermodal station at Millbrae Avenue under this alternative.

154. KEHRLEIN, CHARLES

- 154.1. With your planning of an extension to run into the San Francisco Airport, you should consider extending it across the Bay through the Oakland airport and connecting with BART at the coliseum.

**Response.** Your concept of extending BART across the Bay from the San Francisco Airport to the Oakland Airport and connecting with BART at the Coliseum has been evaluated as part of the Bay Crossing Study prepared by MTC in 1991. Two alternatives (10 and 15) received during the scoping process for this DEIR/SDEIS made similar proposals to extend BART between the San Francisco and Oakland Airports. These proposed alternatives involve extending the project beyond the San Francisco-to-SFIA corridor in order to achieve the stated objectives of the project, thereby failing to meet one of the important threshold criteria in the Screening Report. Therefore, these alternatives were not recommended for further study. For additional information see the BART-San Francisco Airport Extension Screening of Alternatives Report, August 1993.

In addition, the rough capital cost estimate for a Highway/BART Bridge in the I-380 to State Route 238 corridor in the 1991 MTC Bay Crossing Study was \$2.8 to \$3.4 billion (1990\$). This far exceeds the funding capacity for the San Francisco-to-SFIA corridor, and it is over and above BART extension capital costs. The MTC regional rail extension program currently contemplates a people-mover from the BART Coliseum Station to the Oakland Airport, rather than a direct link between the airports. The capital cost makes this proposal financially infeasible.

155. KELLY, JAMES W.

- 155.1. San Mateo County has agreed to absorb the estimated cost of \$60 million per year to operate the system south of Colma....Where do we get \$60 million per year to run BART?

**Response.** Please refer to Responses 10.1 and 14.95 and Chapter 6, Volume I, of this FEIR/FEIS for a discussion of estimated operating and maintenance costs.

- 155.2. The report before us deals with the physical/social environment. It should consider the fiscal environment as well, especially in a county trying to live within its means.

**Response.** Fiscal impacts of the proposed project are certainly important. However, an environmental impact assessment is not required to address the fiscal impacts of a proposed project under either NEPA or CEQA.

- 155.3. Does it make sense to you, as a citizen and taxpayer, to spend \$150-200 million per mile on a commuter railroad?...Los Angeles Metro is boring twin tunnels into North Hollywood for \$35 million per mile. Whatever the reason for it, BART's huge cost differential raises a legitimate question. Why push ahead with something that federal, state, and local taxpayers can't afford?

**Response.** One of the most important reasons for BART and SamTrans to follow through with planning for the BART extension is responsiveness to a public mandate. The BART extension has strong regional support, as demonstrated by MTC Resolution 1876 and San Mateo and San Francisco County ballot measures. In November 1985, San Mateo County voters passed Measure A, by a 73 percent favorable vote, which authorized SamTrans to allocate funds for the BART Colma Extension. In November 1987, San Mateo County voters approved Measure K by 61 percent, which provided for the use of SamTrans funds for a BART extension beyond Colma to the San Francisco Airport. In 1988, MTC approved Resolution No. 1876, which, as updated in 1989, affirmed that the BART-San Francisco Airport Extension was the region's first priority for federal funding. In June 1994, San Francisco voters overwhelmingly approved by 67 percent Proposition I, which directed San Francisco officials to "take all actions necessary" to extend BART service into the Airport terminal area.

Please refer to the Financial Analysis, Volume I of the FEIR/FEIS, for a discussion of financing for the Aerial Design Option LPA.

- 155.4. As the so-called "internal" station is configured, it would put a distance of six stories vertically and up to one-half mile horizontally between trains and planes. At no point in the DEIR can I find any rationale for such an interface between air and ground transportation.

**Response.** The internal airport station is located approximately 50 feet below ground. The walking distances to over 75 percent of the airline check-in counters would be less than 1,300 feet from the center of the BART platform and could be several hundred feet less, depending on which BART train car the passenger rides to the station.

The travel times for accessing airline counters from an external station are actually greater due to the time required for transfer to the ALRS and travel time on this system. In fact, over 75 percent

of the users going to the terminal area and the GTC can use escalators and walk and do not have to ride the ALRS. BART patrons going to Concourse D, which will have less than 20 percent of air passenger activity, and remote employee areas north of the terminal area would transfer to the ALRS under Alternative VI. Please refer to Response 30.5 for an additional discussion of walking distance to the terminals from the Airport International Terminal Station under Alternative VI.

- 155.5. We can do it with what we already have. We have a rail right-of-way from San Francisco to Gilroy and points south. From here to San Francisco is miles and many minutes shorter than BART through Colma. Allow BART the opportunity to add seventy miles to its system, on standard-gauge, high-speed rail, with electrified trains of greater speed, capacity, and comfort than its own. The system would be compatible, as BART now is not, with high-speed trains to Los Angeles and other points. The cost of doing that would be under what is proposed to us for only six miles.

**Response.** The commentor's support of the CalBART proposal is noted.

The comment that CalTrain's standard gauge is possibly compatible with future high speed rail trains to Los Angeles and other points is probably correct. Accommodating high speed rail on CalTrain facilities would require numerous capital improvements including at a minimum: rebuilding new rail; new trackbed and ballast; right-of-way takes for longer horizontal high speed rail turns; and grade separations with cross streets, etc. Please refer to Response 13.4 for a discussion of the CalBART proposal.

- 155.6. The air pollution generated by traffic to and from the stations and notably the parking garages at San Bruno (Tanforan) and Millbrae under Alternative VI, is misleadingly addressed. For example, Tables 3.10-18 and 3.10-15 [of the DEIR/Technical Appendix] provide differing figures for projected eight-hour concentrations of CO at the intersection of El Camino Real and Millbrae Avenue in the year 2000.

**Response.** The data in Tables 3.10-15, 3.10-18, and 3.10-19 of the DEIR/Technical Appendix regarding predicted carbon monoxide (CO) concentrations at El Camino Real/Millbrae Avenue under the TSM Alternative in the 2000 analysis year are in agreement. Table 3.10-18 presents maximum predicted 2000 A.M. and P.M. 1-hour cumulative CO concentrations at El Camino Real/Millbrae Avenue under the TSM Alternative of 10.8 and 11.2 ppm, respectively; Table 3.10-15 correctly identifies the maximum predicted 2000 1-hour cumulative CO concentration at this intersection under the TSM Alternative as 11.2 ppm. Table 3.10-19 presents maximum predicted 2000 A.M. and P.M. 8-hour cumulative CO concentrations at El Camino Real/Millbrae Avenue under the TSM Alternative of 4.9 and 5.1 ppm, respectively; Table 3.10-15 correctly identifies the maximum predicted 2000 8-hour cumulative CO concentration at this intersection under the TSM Alternative as 5.1 ppm.

- 155.7. Around the Millbrae terminal parking garage, the tables would have us believe that automotive air pollution would decrease with BART in operation despite its bringing 3000 daily commute parkers into an area where traffic already is a bubbling cauldron.

**Response.** Local CO impacts near the Millbrae Station parking facilities are evaluated in the DEIR/Technical Appendix, Chapter 3, Section 10. The analyses of local CO impacts at the intersections of El Camino Real/Millbrae Avenue and Rollins Road/Millbrae Avenue under Alternative VI are based on traffic volumes as calculated by a sub-area traffic model. This local traffic model was developed to assign MTC regional traffic forecasts to the local transportation network, and allocated individual vehicle trips to the proposed BART stations. In other words, predicted traffic volumes and associated CO emissions at El Camino Real/Millbrae Avenue and Rollins Road/Millbrae Avenue under Alternative VI incorporate the vehicle trips attracted to the Millbrae Station. Please also refer to Response 66.145.58, 74.27 and 107.161.

155.8. The DEIR should but fails to project the reduction in air quality in residential areas of Millbrae and San Bruno through which BART traffic will pass en route to and from I-280.

**Response.** Air quality impacts attributable to BART traffic en route to and from I-280 are evaluated in the DEIR/Technical Appendix, Section 3.10. Analyses of local CO impacts were performed at several roadway intersections through which BART traffic would travel en route to and from I-280. These intersections include Junipero Serra Boulevard/Westborough Boulevard, I-280 southbound ramps/Sneath Lane, and the intersections of El Camino Real with Hickey Boulevard, Westborough Boulevard, Sneath Lane, and Millbrae Avenue.

The analyses of local CO impacts at these roadway intersections are based on traffic volumes as calculated by a sub-area traffic model. This local traffic model was developed to assign MTC regional traffic forecasts to the local transportation network, and allocated individual vehicle trips to the proposed BART stations. In other words, predicted traffic volumes and associated CO emissions at these intersections incorporate the vehicle trips attracted to the BART stations. Project-related traffic changes will not cause violations of health-based air quality standards. Please refer to Responses 16.80 and 66.145.58 for further discussion of the effects of vehicular emissions.

155.9. Missing also are any data for pollutants from cold-starting of engines and low-speed movement of vehicles within and near the parking structures at Millbrae and Tanforan.

**Response.** The analysis of local CO impacts at BART parking areas considered the effects of both cold-start emissions and slow-moving vehicles.

All vehicles at BART parking areas were assumed to be in cold-start transient mode for the P.M. peak hour analysis. Because cold-start transient emissions are considerably higher than hot stabilized ("warmed-up") emissions, this assumption is most conservative. The fraction of transient starting emissions that occurs within the parking area (as opposed to the fraction that occurs after a vehicle has left the parking area) is a function of egress time. The estimated vehicle egress time from each parking area was based on the assumption of 1) a 30-second idling period (for engine warm-up and to back out of parking stall), 2) travel at 5 miles per hour from the most remote area of the parking structure/lot to the exit, and 3) a 15-second delay at the exit.

Vehicle speed within each BART parking structure/lot was conservatively assumed to be 5 mph. This assumption affects the analysis in two ways. First, the hot-stabilized emission rate is calculated at 5 mph. (Emission rate is inversely related to vehicle speed.) Second, this assumption heavily influences the vehicle egress time. As noted above, longer vehicle egress times result in a greater fraction of incremental cold-start emissions occurring within the parking area.

Please refer to Section 5.6.3 of the Air Quality Technical Report and to Response 14.73 for more information.

155.10. "While there would be a reduction in freeway traffic north of San Francisco International Airport (if BART is extended), the BART build alternatives would increase traffic on freeway segments to the south." By how much and with what negative effects on air quality? The public is entitled to know.

**Response.** Tables 3.1-72, 3.1-74 and 3.1-76, Freeway Level of Service for Years 1993, 1998 and 2010, respectively, in the DEIR/Technical Appendix contain the freeway volumes and percent changes from the No Build Alternative for the A.M. and P.M. peak hour in the peak direction. Please refer to Response 134.6 for a discussion of the greatest number of vehicles added to Highway 101 under the BART build alternatives.

The increase in vehicular traffic on the segments of Highway 101 south of the airport was accounted for in the analysis of regional air quality impacts. The increase in traffic on Highway 101 south of the airport would be offset by reductions in traffic elsewhere in the region (e.g., on Highway 101 north of the airport), resulting in a net decrease in regional vehicle miles traveled (VMT) and associated pollutant emissions under the BART build alternatives as compared to those under the No Build Alternative. Please refer to the DEIR/Technical Appendix, Table 3.10-5 for a comparison of regional VMT and resulting pollutant emissions under the BART build alternatives with those under the No Build and TSM Alternatives. Please refer to Responses 107.159 and 107.161 for further discussion of regional vehicular pollutant emissions.

- 155.11. The DEIR [cannot] ignore that BART-generated traffic from the south would be on top of what airport expansion will produce, e.g., 1) a larger SFIA workforce drawn mainly from areas south and east where car commuting can be of necessity, and 2) more business and leisure travelers from the Peninsula and Silicon Valley attracted by SFIA's wide array of flights.

**Response.** The traffic impacts of the planned SFIA expansion under their Master Plan was incorporated in the traffic analysis contained in the DEIR/SDEIS. Please refer to Response 14.5 for a discussion of conditions as reported in the SFIA Master Plan EIR and their inclusion in the BART extension DEIR/SDEIS.

- 155.12. San Mateo County has agreed to pay BART's operating costs between Colma and SFO. In discussing costs and revenue sources, the DEIR doesn't offer an estimate of what our county would have to pay annually or suggest a "pocket" deep enough to cover whatever the farebox can't.

**Response.** Please refer to Response 155.1 for a discussion of estimated operating costs for the extension.

- 155.13. It's plain that the project has weak links. Among them are that: 1) BART's route between San Francisco and its airport is more circuitous, longer, and slower than what is offered by existing bus and train service; 2) deep subway access and no luggage space on cars would discourage BART use by air travelers; 3) the "internal" airport station offered in Alternative VI would confront air travelers with a gap of six to seven stories vertically and up to one half mile horizontally between trains and planes -- not the kind of intermodal interface that travelers expect from an airport with the opportunity to design a connection from scratch.

**Response.** Trip times projected for the internal airport station adjacent to the proposed International Terminal are substantially less than those available by other public transit rubber-tired modes. Current CalTrain service with stops at Millbrae involves longer trip times and especially regarding bus service frequency and schedules. Bus service from Daly City Bart Station likewise involves great uncertainty with regard to trip times since the bus traverses the same roads as private vehicles to access the terminals.

Please refer to Responses 30.4 and 155.4 for further discussion of trip times from the external and internal airport stations.

#### 156. KOCHEVER, ROBERTA AND WILLIAM

- 156.1. We are writing this letter to urge you to select Alternative VI with the bored tunnel option for the BART extension through San Bruno.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process. A

bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

- 156.2. Because the decision to have BART come through San Bruno is not favorable to all of us who live here, we feel that none of the costs for its construction or operation should be paid for by the citizens of San Bruno, who, most likely, will never use it.

**Response.** Please refer to Response 19.21 for a discussion of the role of the cities in funding the project and Response 107.14 for a discussion of local participation in the cost of the project. Also, please refer to Response 155.3 for a discussion of public support for the extension.

- 156.3. It makes absolutely no sense to choose a plan which would destroy any homes in the Belle Air neighborhood. That would be destroying some of the very few affordable homes in the city besides the [Fifth] Addition. Taking homes here in the [Fifth] Addition would not be quite as bad since we are surrounded by train tracks, businesses, a freeway and a shopping center, and are already pretty much isolated.

**Response.** Comment noted. Only the Base Case Alternative would displace homes in the Belle Air neighborhood. The Aerial Design Optional LPA would not displace any housing in San Bruno.

## 157. KOLL REAL ESTATE SERVICES COMPANY

- 157.1. The Towne Center Shopping Center located at the corner of El Camino Real and Sneath Lane in San Bruno is opposed to a BART Station at Tanforan. We believe the construction and operation of the proposed BART Station would be highly disruptive to the Towne Center. Consequently, we would like to request that the Tanforan Station be dropped from the BART Extension to the SFIA.

**Response.** The Towne Center Shopping Center's opposition to a Tanforan Station under Alternative VI is noted. Based on the environmental information in the DEIR/SDEIS and on a preliminary evaluation of comments received, the BART and SamTrans boards selected Alternative VI as the new LPA on April 27 and 28, 1995 for advancement to further preliminary engineering and environmental evaluation. The new Aerial Design Option LPA includes a proposed Tanforan Station. The environmental impacts of this proposed station are fully documented in the DEIR/Technical Appendix.

- 157.2. We foresee a major parking shortage at the Towne center as regular BART riders and persons using the shopping center for airport parking fill up our parking spaces. We also foresee major increases in traffic on Sneath Lane and Huntington Avenue as well as the intersection of El Camino Real and Sneath Lane.

**Response.** Please refer to Response 10.10 for a discussion of the potential for the one-day air passenger to park at certain BART stations rather than park in airport lots and BART's strategy for prevention.

The revised station design for BART's proposed Tanforan Station under Alternative VI changes the parking garage from a joint use facility with the Tanforan Park Shopping Center Garage to a separate BART garage located to the east of Sears Tire, Auto and Battery Center. Park-and-ride BART patrons at the Tanforan Station would not use the Towne Center parking lot because of its distance from the BART station and the requirement to cross Sneath Lane. The Towne Center parking lots would be monitored for the possibility of overflow parking from the Tanforan Station. Please refer also to Response 241.9 for a discussion of overflow parking into the Tanforan Shopping Center.

Traffic operations at the intersection of El Camino Real/Sneath would be significantly impacted with either of the proposed Tanforan Stations. Please refer to Response 17.48 for a discussion of mitigation measures related to El Camino Real/Sneath intersection. The intersection of Huntington/Sneath would be modified with either of the proposed Tanforan Stations including the signalization of this intersection. Traffic operations at the intersection of Huntington/Sneath would operate at LOS A with these improvements under a BART build alternative that includes a Tanforan Station.

- 157.3. We believe the construction of the BART Tanforan Station and the BART line through San Bruno will be very disruptive to local traffic and could drive away many of our customers.

**Response.** Significant construction impacts to traffic on Huntington, San Bruno Avenue and other local streets in this vicinity would be mitigated. Please refer to Response 17.62 for a discussion of traffic impacts along Huntington Avenue during construction in the vicinity of the Towne Center and Tanforan Park Shopping Center; Response 17.71 for a discussion of traffic impacts along Huntington to the south of the Tanforan Park Shopping Center Avenue during construction; Response 34.9 for a discussion of traffic impacts along South Spruce Avenue; and Response 66.72 for a discussion of the use of Huntington Avenue by construction trucks related to the BART extension.

Please also refer to Responses 17.65 and 17.71 for additional information regarding construction impacts.

- 157.4. If customers are driven away and merchant sales are adversely affected, then the value of the Towne Center will decline and the property tax and sales tax revenues to the City of San Bruno will decline as well. If this occurs, then BART should be required to compensate the owners of Towne Center for a reduction in property values, the merchants of the Shopping Center for lost sales, and the City of San Bruno for lower property tax and sales revenues....

**Response.** Please refer to Responses 16.73 and 139.1 regarding BART's effects on property values.

- 157.5. We do not believe any of the mitigation measures proposed on pages 3.1-28 and 3.1-29 [of the Summary DEIR/SDEIS] will be effective in reducing the number of people using the Tanforan Station for airport parking....Consequently, we believe the 1000 parking spaces proposed for the Tanforan Station in Alternative VI and the 1300 parking spaces proposed for the station in the Locally Preferred Alternative are woefully inadequate.

**Response.** Please refer to Response 10.10 for a discussion of the potential for the one-day air passenger to park at certain BART stations (rather than park in airport lots) and BART's strategy for prevention.

- 157.6. The analysis in the DEIR/SDEIS of the traffic impacts of the proposed Tanforan Station on the intersection of El Camino and Sneath Blvd. and Huntington Avenue is inadequate. The analysis on pages 3.1-18 through 3.1-25 does not consider the traffic impacts of people using the parking garage at the Tanforan Station and the Shopping Center parking lots for airport parking....Improvements needed to maintain a satisfactory level of service may be much more elaborate than the improvements to the intersection of El Camino and Sneath Lane called for on page 3.1-25 of the DEIR/SDEIS....BART should be required to pay for these signal improvements as well as all other traffic improvements needed to mitigate the negative impacts of the Tanforan Station on Sneath Lane.

**Response.** Air passengers will not be permitted to park at the Tanforan Station parking facilities. Please refer to Response 10.10 for a discussion of air passenger parking at BART stations. BART will pay its fair share of improvements to the intersection of El Camino Real/Sneath under BART

build alternatives with a Tanforan Station. Please refer to Response 17.6 for a discussion of BART funding mitigation at the intersection of El Camino Real/Sneath. Other measures will be taken to improve the traffic system in the vicinity of the Tanforan Station parking facilities, if this site is chosen, including signalization of the intersection of Huntington/Sneath.

157.7. If...a decision is made to move ahead with a station at Tanforan, then we believe the station should satisfy all of the following conditions:

- The station is located across the street from the existing Tanforan Parking Garage as proposed in Alternative VI in the DEIR/SDEIS.
- Parking is substantially increased and a comprehensive effective plan for dealing with short-term and long-term parking is developed.
- BART fully mitigates the negative impacts of construction on the Towne Center including noise and dust impacts, excavation impacts, and negative impacts on traffic circulation and parking.
- BART pays for all traffic mitigation needed on Sneath Lane, Huntington Avenue and the intersections of El Camino and Sneath Lane, and El Camino and Noor.
- BART pays for direct access from Huntington Avenue to Highway 101.
- BART pays for all needed parking enforcement in the Towne Center parking lots; and
- BART compensates the owners of the Towne Center for reductions in property values and the merchants for lost revenues resulting from the construction and operation of the Tanforan Station.

**Response.** BART/SamTrans, the City of San Bruno, Hapsmith Tanforan Shopping Center representatives and community representatives have developed the Tanforan Station Concept Plan which mitigates impacts to adjacent residential neighborhoods, provides 1,000 dedicated BART parking spaces for BART patrons, and provides replacement parking for Tanforan Shopping Center. Additionally the plan provides for realignment of Huntington Avenue and signal station at Huntington and Sneath and mitigations for associated traffic impacts. The following responses address the commentator's points.

Bullet #1: There is no rationale given for the condition that the station be located across the street from the existing Tanforan Shopping Center Parking Garage.

Bullet #2: Long-term parking demand is estimated in accordance with modeled parking demand. Please refer to page 3.1-183 of the DEIR/Technical Appendix, Table 3.1-104. To the extent there might be shortfalls or spillover parking impacts, parking mitigation measures are discussed on page 3.1-167 of the DEIR/Technical Appendix, Mitigation Measure 2.1, and page 3.1-169 of the DEIR/Technical Appendix, Mitigation Measures 6.1 and 6.2. Please also refer to Response 14.24 regarding parking-related concerns.

Bullet #3: Construction will comply with BART specifications which addresses contractor responsibility to mitigate noise and dust, excavation, and traffic circulation. Construction-period mitigation measures or these types of impacts are noted in Section 3.13 of the DEIR/Technical Appendix.

Bullets #4 and 5: BART will pay for its proportionate share of traffic mitigation resulting from impacts of BART project.

Bullet #6: Parking enforcement is a local jurisdictional matter.

Bullet #7: BART/SamTrans will address Towne Center merchants demonstrable loss of revenue in accordance with federal and state laws.

For parking management please refer to Response 14.24.

158. KOPATSCHEK, HAYDEE

- 158.1. Alternatives] IV and V...would involve the complete loss of Millbrae Nursery School, its outstanding play yard, plus heritage trees....See that BART chooses another plan which does not involve the elimination of the nursery school.

**Response.** The Millbrae Nursery School would be displaced only under Alternatives IV and V, as well as under Design Options V-A and V-B. These and other impacts were considered by the BART and SamTrans boards during the LPA selection process in November 1995 (please refer to Response 2.7). The Alternative VI Aerial Design Option selected as the LPA by both boards would not displace the nursery school.

159. KOSS, DIANE M.

- 159.1. BART has presented six proposals for the Airport/Peninsula extension. Two of these six proposals would eliminate the nursery school site...to create a widened walkway to the proposed Intermodal Station at Center Street. (See Figure 9, page 131 [of the Design Appendix]...). It is possible to re-route the proposed walkway and therefore clear the school building. The school has a large front area and could possibly grant an easement to BART over a portion of this area.

**Response.** If Alternative IV or V were selected, additional detailed engineering of the station and access areas would be undertaken. At that stage the exact acquisition requirements would be determined and an alternative that would not require displacement of the Millbrae Nursery School could be considered.

- 159.2. It would be greatly appreciated if BART would either choose a different proposal or modify the two existing proposals so that the Nursery School is not eliminated.

**Response.** The Millbrae Nursery School would be displaced only under Alternatives IV and V, as well as under Design Options V-A and V-B. These and other impacts were considered by the BART and SamTrans boards during the LPA selection process in November 1995 (please refer to Response 2.7). The Alternative VI Aerial Design Option selected as the LPA by both boards would not displace the nursery school.

160. KREJEWSKE, GRAZYNE

- 160.1. BART...was to go to the airport not near it so only design options V[-A] and VI are acceptable.

**Response.** The commentor's support for Alternative VI and Design Options V-A and V-B because they go directly to the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process). The Alternative VI Aerial Design Option includes direct airport access.

- 160.2. CalTrain should also go to the airport and connect with BART. This will increase BART ridership...[and] reduce the number of cars on 101.

**Response.** An alternative in which both CalTrain and BART go into the airport would duplicate the service of either system going into the airport alone. The capital costs would be extraordinary and financially infeasible. The BART LPA alignment and station at the airport has an on-airport \$371 million capital cost for a 22-foot-diameter double-bore twin tunnel and cut-and-cover station at the proposed Airport International Terminal. A CalTrain subway alignment into the airport and cut-and-cover station would also be expensive because it requires 35-foot-diameter twin tunnels and a 1,000-foot-long platform compared to a 700-foot-long BART platform. Jim Kiesling of the Regional Alliance for Transit estimates that a CalTrain relocation from Millbrae to South San Francisco via the Airport International Terminal and United Airline Maintenance Center would cost approximately \$401.9 million (1994 dollars), approximately doubling the capital costs for a joint CalTrain/BART extension into the airport terminals.

In addition, the commentor is referred to Response 13.4 for discussion of the CalBART proposal.

- 160.3. Have people in affected neighborhoods vote on their options: 1) no BART...; [and] 2) possible displacement of some residents.

**Response.** The BART extension project is a regional transit project, designed to improve transportation in the entire region. Please refer to page 1-8 of the DEIR/Technical Appendix for a discussion of measures voted on by San Mateo County residents.

- 160.4. I assume you would provide alternative residences for the people whose houses need to be destroyed.

**Response.** Any residential occupant displaced directly as a result of construction and property acquisition would be eligible for relocation benefits, which include purchase/rental differential payments, escrow fees, moving costs, and technical assistance if needed in searching for a replacement dwelling. Please refer also to Response 72.189 for a discussion on replacement housing.

#### 161. LAVAKI, EMELINE A.

- 161.1. Leave BART out of Millbrae.

**Response.** The commentor's opposition to the BART extension through Millbrae is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option. Please refer to Response 2.7 for a discussion of the LPA selection process. The LPA would include a new station at Millbrae Avenue.

- 161.2. [There will be] crime, robbery, and more homeless sleeping and walking into our safe neighborhood (Bay Side Manor). I am scared for the future and safety of my children.

**Response.** Please refer to Responses 16.2 and 143.2 regarding neighborhood safety impacts resulting from the proposed BART extension.

#### 162. LAWLER, SHEILA B.

- 162.1. I vehemently oppose the implementation of any of the plans set forth by BART. The impact of further extension by BART impacts us in a manner which is unacceptable and outrageous. We are unwilling to support non-county residents and big business.

**Response.** The commentor's general opposition to the BART extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards

when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option. Please refer to Response 2.7 for a discussion of the LPA selection process.

163. LAWLOR, OWEN

- 163.1. I am interested in any project that reduces the traffic and air quality [problems] in the region. I recognize that both traffic and air quality may worsen at specific intersections in the project corridor, but that is the nature of any regional project: a large overall benefit balanced against worsening situations for a few residents.

**Response.** The commentor's support for the BART extension to the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Please refer to Response 2.7 for a discussion of the selection of alternatives considered during the EIR/EIS process.

- 163.2. I am...concerned about the possibility that a project of this magnitude may not be able to find adequate funding in the current political atmosphere in Washington....Although I have heard that SamTrans could be bankrupted by its commitment to the BART extension, I am skeptical of this....I feel that a rational approach for SamTrans would be reduction of the absurdly high subsidy of CalTrain operations, and cooperative support of the BART extension operations.

**Response.** SamTrans is a co-sponsor of the BART SFO Extension, and is working cooperatively on the proposed project. The JPB is sponsoring the study of a CalTrain extension to downtown San Francisco, with result expected in late 1996. A decision to subsidize CalTrain is distinct from a decision to support the BART-SFO Extension

Please see Response 30.29 for a discussion of funding for the project.

164. LAZARETO, MILA

- 164.1. We appeal not to extend [the] BART Station to Millbrae Avenue, if that would mean demolishing our homes [Garden Lane and Aviator apartments (Millbrae).]

**Response.** The commentor's opposition to the impacts caused by the Millbrae Avenue Station that would be constructed under Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process). As stated Section 3.2 of the DEIR/Technical Appendix, the Alternative VI Aerial Design Option would result in displacement in the Millbrae Gardens neighborhood.

- 164.2. We cannot afford housing in other places here in the Peninsula with market rent as high as \$850-\$900.

**Response.** If Housing Valuation Studies conclude that replacement housing lies only outside the immediate area, the replacement costs will be calculated accordingly. Please also refer to Responses 16.16 and 72.189 for a discussion of these studies and payments to displaced residents.

165. LEWIS, TRACY

- 165.1. Alternatives] IV and V would involve the complete loss of Millbrae Nursery School, its outstanding play yard, plus heritage trees....See that BART chooses another plan which does not involve the elimination of the nursery school.

**Response.** The Millbrae Nursery School would be displaced only under Alternatives IV and V, as well as under Design Options V-A and V-B. These and other impacts were considered by the BART and SamTrans boards during the LPA selection process in November 1995 (please refer to Response 2.7). The Alternative VI Aerial Design Option selected as the LPA by both boards would not displace the nursery school.

#### 166. LIGHTHOUSE HOTEL

- 166.1. I heartily support Alternative VI because it in fact is an integrated system that allows for convenient connections between BART and CalTrain with the intermodal station in Millbrae.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process. The Alternative VI Aerial Design Options includes a joint BART/CalTrain station in Millbrae.

#### 167. MATULICH, TISH

- 167.1. I am writing to you in regards to the proposals, IV and V....It is my understanding that if either of these proposals is passed, Millbrae Nursery School would lose its facility....I truly hope that you will choose a plan that will not in any way cause this very fine school to close.

**Response.** Please refer to Response 165.1 for a discussion of the displacement of the Millbrae Nursery School.

#### 168. MAZZA, HILDA

- 168.1. Alternatives] IV and V would involve the complete loss of Millbrae Nursery School, its outstanding play yard, plus heritage trees....See that BART chooses another plan which does not involve the elimination of the nursery school.

**Response.** Please refer to Response 165.1 for a discussion of the displacement of the Millbrae Nursery School.

#### 169. MCCRANEY, JIM

- 169.1. The national political environment is to cut Federal spending to the bone. As a result, any contribution by the Federals to this BART to SFO project will probably be less than had been expected previously.

**Response.** Please refer to Response 30.29 for a discussion of opportunities for federal funding.

- 169.2. Another economic consideration is whether the City and County of San Francisco will be in a position to provide the substantial funds required to provide a BART station inside the SFO terminal.

**Response.** The budget of SFIA is entirely separate from that of the City and County of San Francisco. SFIA is committed to a maximum \$200 million contribution.

- 169.3. The Alternative V-A with a Minimum Length Subway to Airport GTC and San Bruno is my recommendation....With a subway it may not even displace any housing units at all....This may be the lowest cost alternative....This alternative would allow connection to the Airport Light Rail

System and CalTrain, but would also allow extension into SFO at a later date....Any parking facilities at this location could be fully financed through parking fees.

**Response.** The commentor's support for Design Option V-A is noted. Design Option V-A results in higher displacement than the Alternative VI Aerial Design Option Alternative V (which the BART and SamTrans boards selected as the LPA in November 1995). In addition, the costs are lower for the new LPA than for the Design Option V-A. Finally, the BART and SamTrans boards selected the Alternative VI Aerial Design Option as the LPA in part because it includes extension into the airport (please refer to Response 2.7 for a discussion of the selection process).

- 169.4. The only practical way to provide parking at the Intermodal Station is to charge the same rates as charged at the SFO long-term lots. If the BART lot parking is free or at a lesser rate, the lot will be filled with parkers flying out of SFO. As a result, there will be no space for BART or CalTrain users....My conclusion is that no funds should be used for parking facilities at the SFO Intermodal Station because such facilities could be provided by private money with a percentage to be paid to BART.

**Response.** The parking facilities at the BART-SFIA Extension stations are for BART patrons and the supply of parking is based on the results of MTC's mode choice modeling and the traffic sub-area model. Parking at these BART stations by air passengers would be prevented. Please refer to Response 10.10 for a discussion of the potential for air passengers to park at certain BART stations rather than park in airport lots and BART's strategy for prevention.

- 169.5. The several alternatives that swing towards or across 101 seem to be costly and a waste of money in an attempt to respond to complaints by a residence group. Also, the proposals that have a Millbrae Intermodal Station are a waste of money....The alternatives that go through SFO to reach the Intermodal Station have the great disadvantage of needing money from the City and County of San Francisco that might not be forthcoming for many years due to budget problems.

**Response.** The commentor's opposition to those alternatives that cross Highway 101 or feature a Millbrae Intermodal Station (Alternatives IV, V, and VI and Design Options V-A and V-B) is noted. The Alternative VI Aerial Design Option selected by the BART and SamTrans boards as the LPA in November 1995 does not include a downtown intermodal station, although there would be a station at Millbrae Avenue. Finally, as part of the financial plan approved by BART, no local contribution would be required for project implementation so the City and County of San Francisco will not be financially affected by the project.

- 169.6. If the Downtown San Bruno Intermodal Station were located opposite Belle Air School in the present CalTrain parking lot, and placed underground for BART, it appears that no housing would be displaced.

**Response.** An alternative similar to this one was proposed during the Alternative Analysis phase of the Project by MTC. Even though no homes would be taken, vehicular access and parking would be totally inadequate to accommodate the demand at this station. The proposals associated with Alternative VI were developed to be sensitive to the issue of displacement of residences. The Tanforan Station location under Alternative VI requires no displacements.

## 170. MECKLER, AL

- 170.1. Whether this airport transport stops at a BART station across the freeway or at mid-terminal makes no difference. It is the physical and operational interface that matters....The decision should be made on operational costs and considerations, not the cost to build....The physical interface between the three transport systems at the airport intermodal station seems very simple, straight-forward, and very un-imaginative. I hope it works more efficiently than it looks, from a user perspective.

**Response.** The external BART Airport Station has several disadvantages with regard to passenger convenience, level of service and overall travel times to the airline ticketing and check-in counters. The internal station provides shorter travel times for over 75 percent of the users. In addition, with an internal station, the ALRS would not have to extend almost one mile farther, as is required to serve an external station. An external station would add capital and operating costs to the system. Under an External Airport Station as under the 1992 LPA and Alternative III, all passengers would need to transfer from either BART or CalTrain to the ALRS to access the terminal area.

- 170.2. I favor...Alternative III (1st choice), or Alternative V (I-380) (2nd choice). I see no merit in IV or V-A.2 and...some of these plans have either too many stations (4) VI, where nothing (or not much) is gained in the extra station (and there is extra cost...), or there are too few stations (V-B).

**Response.** The commentor's preference for Alternatives III and V is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).

- 170.3. As for construction (bored tunnel vs. cut-and-cover), I favor the shortest actual construction time. Please do not misinterpret this as the soonest in service date, this is not what I mean. The longer the construction period, the greater the chance of cost over-runs and the greater the disruption to the community and business.

**Response.** BART has selected implementation by design/build to allow an overlap between the design and construction periods, thus minimizing the construction time.

## 171. MENDELSON, GLENN

- 171.1. Regarding BART's Alternative VI, which places a "tailtrack" into Burlingame, I see no benefit to my community and some serious negative ones including increased traffic congestion;...funding...[which] poses the greatest economic threat to the future of SamTrans,...[and] also poses a threat to the future of our existing rail-transit system....

**Response.** The commentor's opposition to Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process). Regarding traffic congestion, please refer to Responses 14.36 through 14.41; regarding SamTrans, please refer to Response 10.1.

- 171.2. Let's support the TSM.

**Response.** The commentor's preference for Alternative II is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).

## 172. MICHEL, ARTHUR H.

- 172.1. Unfortunately none of the alternatives for a BART/SFO extension are likely to provide rapid and convenient access to the airport from all parts of the Bay Area via public transportation. The only way to achieve this goal would be to place BART stations within easy walking distance of each of the airline terminals...

**Response.** The commentor's preference for a BART station at the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (please refer to Response 2.7 for a discussion of the LPA selection process). Under the LPA, BART would enter the airport at the planned international airport. Passengers would be able to either walk to the other terminals or ride the ALRS.

- 172.2. Given the existing alternatives I think it makes most sense to bring both BART and CalTrain into a common multimodal terminal (either LPA, III or V) where passengers using either system can transfer directly to the internal airport light rail system. Unfortunately the critical unknown factor (the light rail connector itself) is not included within the purview of your planning document.

**Response.** The airport light rail system (ALRS) does provide a direct connection to the airline terminals and employee areas east of Highway 101. There are, however, a number of disadvantages to the external station associated with the proposed project, Alternative III or IV. The Design Appendix to the DEIR/SDEIS contains site plans and sections for the BART/CalTrain/Airport Light Rail System Intermodal Station. The site plan and section for the Airport Intermodal Station under the proposed project and Alternative II is shown on pages 123 and 124 of the Design Appendix. Site plans and sections for the I-380 San Bruno and Downtown San Bruno Stations under Alternative V are shown on pages 115, 116, 119, and 120 of the Design Appendix. The alignment for the ALRS to the CalTrain or BART/CalTrain station west of Highway 101 is shown on page 2-29 of the DEIR/Technical Appendix.

#### 173. MIDSON, RAMONA AND BRACKER, JESSIE

- 173.1. There should be much more...explanation of CalTrain's benefits that are possible and of how much cheaper CalTrain can be than the building of BART and how CalTrain would disrupt no homes....It should be truthfully shown that [CalTrain] is a proven transportation System already...in place and caus[ing] no disruption. It is faster than BART and can carry more people than BART on its trains.

**Response.** The commentor's support for the TSM Alternative is noted. The BART and SamTrans boards selected the Alternative VI Aerial Design Option as the LPA in November 1995 (please refer to Response 2.7 for a discussion of the LPA selection process and the implications for CalTrain improvements).

#### 174. MILLBRAE RESIDENTS (475 PEOPLE)

- 174.1. You have failed to calculate the cost of replacing dreams and memories associated with these soon to be destroyed homes.

**Response.** Please refer to Response 116.4 for a discussion of this topic.

- 174.2. Millbrae does not need BART, has not voted for BART, will not benefit from BART and cannot afford BART.

**Response.** The commentor's opposition to the BART extension through Millbrae is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option. Please refer to Response 2.7 for a discussion of the LPA selection process.

- 174.3. In you report you very conveniently state that those impacts which you cannot mitigate, you do not have to mitigate. If your plan does not cooperate with our city's general plan and land use policies, you could ignore the plans and policies.

**Response.** The DEIR/SDEIS proposes feasible mitigation for significant environmental impacts. Mitigation is also proposed for other insignificant impacts in some cases. Please refer to Page 3.2-35 of the Summery DEIR/SDEIS for a discussion of BART's exemption from local regulation.

- 174.4. We [475 residents of Millbrae]...oppose any station in Millbrae that would alter our residential neighborhood in any way. We oppose the current LPA, Alternative III, Alternative IV, and Alternative V.

**Response.** The commentors' response to the proposed project and Alternatives III, IV, and V due to the construction of intermodal stations in Millbrae is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process. The new Aerial Design Option LPA includes neither the Airport Intermodal Station nor the downtown Millbrae Intermodal Station. However, there would be an Intermodal Station at Millbrae Avenue.

175. MILLER, NORMA

- 175.1. I agree on the sixth alternative....So do not interrupt people's lives, their homes, schools, [and] businesses. Do not disturb the surface of the ground all the way through San Bruno....

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process. A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

176. MIRTA, HASSAN

- 176.1. I oppose [the] BART/SFO Extension into Millbrae because of increased noise, traffic, crime, and safety concerns near my house and a possible reduction in my property value. Please consider as an alternative the improvements of CalTrain and/or SamTrans.

**Response.** The commentor's opposition to the BART extension through Millbrae, and preference for the TSM Alternative, is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option. Please refer to Response 2.7 for a discussion of the LPA selection process.

177. MIYASHIRO, LOIS K.

- 177.1. Since BART currently has a difficult time operating, maintaining and servicing existing BART trains, stations and tracks--how will BART be able to operate, maintain and service any new trains, stations or tracks if it expands its service?

**Response.** All of the BART build alternatives include modifications to the Daly City BART Yard and car wash facilities. The existing Daly City Shop and Yard would be modified to handle maintenance requirements for the proposed extension. The existing Shop and Inspection Building would be expanded to provide a maintenance pit for four transit vehicles and a wheel truing machine. A one-car turntable for turning around BART vehicles would be located at the south end of the yard. In addition, all of the BART build alternatives include a rail car wash facility.

With provision of any BART build alternative, BART's Operations and Maintenance staff would be expanded to operate and maintain the new facilities. Labor is the largest single component of the increased operating and maintenance costs associated with the BART build alternatives shown in Table 6-2, on page 6-4 of the DEIR/Technical Appendix.

The commentor's assertion that BART has a difficult time operating, maintaining and servicing existing trains is noted. However, BART has an outstanding operating and maintenance record as documented in the *BART Short Range Transit Plan*, July 1995 through June 2005. Stringent preventative maintenance procedures, efficient parts procurement and inventory methods, and technical expertise developed over the years have been instrumental in the achievement of high reliability standards. Between July 1, 1994 and June 30, 1995, BART had a passenger on-time performance of 92.5 percent. (Passenger on-time performance is defined as the percentage of customers arriving at their destination stations within five minutes of the scheduled train-run times.) During the same period an average of 446 revenue vehicles were available for service each day by 4 A.M.

Maintenance efforts focus on minimizing incidents that cause train delays. BART's objective is to achieve a rate no higher than three train delay events for every 100 dispatches, or 3 percent. Between July 1, 1994 and June 30, 1995, the train delay rate was a favorable 2.75 percent. Further support for BART's delay-reduction program were efforts in Fiscal Year 1995 to increase the mean-time between service delays. A key focus has been to reduce vehicle failures to no more than one every 1,200 car hours. Actual performance in Fiscal Year was favorable with one delay every 1,127 car hours. Over the past three years, performance with respect to this measure has improved about 10 percent annually.

- 177.2. When the Colma BART station opens in the next few months and if the SFO and San Mateo County extension is approved, the odds of getting seats will drop drastically....What measures will BART take to mitigate this problem so that people down the line will be able to get on a train, get a seat and get to work on time? Can or will BART commit to running trains every two minutes instead of the current four minutes?...Are there any plans on running the trains closer together during the morning and evening commute hours?

**Response.** One of BART's basic service objectives is to provide adequate capacity, such that the ratio of on-board passengers to seats (i.e., load factor) averages 1.15 during peak periods and 1.0 during off-peak periods. Efforts to achieve this objective are often precluded by headway constraints and BART's ten-car maximum allowable train length. The load factors are measured at a screenline, the maximum load point for each route. For example, the maximum load point during the morning peak for trains northbound from Daly City to downtown San Francisco is between the 16th Street and Civic Center Stations. Average load factors for July 1994 through March 1995, measured at the screenline between 16th Street and Civic Center, were 0.87 for the peak one-hour and 0.64 for the peak three-hour commute.

BART recently completed installation of the System Throughput Enhancement Project (STEP), which enables BART to run trains 2.25 minutes apart. This enhancement is in preparation for the extension service beginning in the fall. BART, however, cannot commit to running trains every two minutes as suggested by the commentor.

- 177.3. I urge BART to charge a \$1.00 parking fee at all of its parking facilities. The revenue can go towards maintaining and servicing BART trains, escalators, tracks, etc. Does BART plan to charge a fee at any of its existing, new or proposed parking facilities?

**Response.** Per the BART/SamTrans Comprehensive Agreement Pertaining to BART System Extension (1990), "SamTrans may establish parking charges at parking lots serving stations of the SFO Extension that are funded and built as part of the Colma Project or SFO Project." The SamTrans Board of Directors may consider parking charges at the SFO extension stations in the future.

BART is not considering parking charges within the three-county District. BART currently offers nearly 34,000 parking spaces at 24 of the 34 stations. Parking spaces are free except for a 25 cent charge at the Lake Merritt Station. During the BART Board of Directors fare increase considerations this spring, the Board considered parking charges of \$1 and \$2, ranging from all spaces to premium spaces, and excluding BARTPool and disabled parking spaces. The Board decided to reject parking charges as an option to raise revenues.

- 177.4. If the SFO and San Mateo County extension is approved, will BART extend its hours of operation?...Does BART have any plans on starting its service earlier on Sundays?

**Response.** As noted in Response 104.1, BART has no plans to extend its hours of operation.

178. MONACO, DANIEL J.

- 178.1. There should be no alternatives to the extension of BART into the airport itself. The only issues to be decided are financing and the route to get there.

**Response.** The commentor's support for the BART extension to the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option. Please refer to Response 2.7 for a discussion of the LPA selection process.

179. MORSE, DORIS

- 179.1. Millbrae believes that BART should be extended into the San Francisco International Airport, not near it.

**Response.** The commentor's support for the BART extension to the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option. Please refer to Response 2.7 for a discussion of the LPA selection process. The LPA incorporates a BART extension into the airport and an ALRS to the terminals.

- 179.2. Although the citizens would prefer that no BART station be located in Millbrae, if there is to be a station, it should be at Millbrae Avenue. Thereby, making VI the only feasible alternative that will protect the integrity of our single-family residential neighborhoods. However, Millbrae will only support Alternative VI if all the adverse impacts are fully mitigated and those mitigations are fully funded by the BART Extension project.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. The BART and SamTrans boards selected the Alternative VI Aerial Design Option, which includes a station at Millbrae Avenue. Please refer to Response 2.7 for a discussion of the LPA selection process. BART is currently working with the City of Millbrae to develop a Millbrae Avenue Station design that avoids or minimizes many of the impacts (please refer to Response 10.18, 16.76, and 16.101 for a discussion of station design modifications proposed by the City of Millbrae). BART will fund mitigation measures to cover the impacts it causes, as required by CEQA.

180. MOYES, JACKIE

- 180.1. [Mayfair Village residents] support only the complete underground BART between Orange & So. Spruce in SSF. A retained cut, as in Alternative III, would ruin our neighborhood and be a tremendous eyesore.

**Response.** The commentor's opposition to the retained cut between Orange and South Spruce Streets under Alternative III is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA, which includes a subway alignment through this area. Please refer to Response 2.7 for a discussion of the LPA selection process.

- 180.2. Have tests/studies been done re[garding] noise vibrations and effects on nearby homes? We received a letter re[garding] this issue from our City recently but with no specifics re[garding] the known effects. We want this information.

**Response.** Studies have been performed in the area of Sycamore near Myrtle, and preliminary analysis is consistent with previous results regarding groundborne noise and vibration impacts. The soil vibration characteristics data acquired will be refined and used in a more detailed analysis during the engineering phase of the project, as will the data obtained from building vibration tests on homes in this area. All of the data collected will be used to determine specific mitigation measures.

- 180.3. Are homeowners compensated for damages if proven to be a result of BART?

**Response.** BART/SamTrans would address demonstrable loss of income due to BART construction in accordance with federal and state laws.

- 180.4. How far/close to the homes along Myrtle, SSF will the tunnel lie? Will it go under the Los Cerritos School play yard and is the school closing, as rumored? I don't mind the school closing...but I would greatly prefer that the Southern Pacific-owned (school...) property be used so that the tunnel is...isolated [farther] away from the adjacent neighborhood [along] backyards Myrtle Street South San Francisco.

**Response.** As shown on pages 9, 10, 30 and 31 of the Design Appendix, the proposed permanent operating easement for the 1995 LPA and all of the BART build alternatives varies from 25 to 50 feet from the back of homes along Myrtle Avenue. The permanent operating easement for the subway alignment of the 1995 LPA does not go under the Los Cerritos Elementary School play yard. The school would not be closed as a result of BART construction.

The horizontal alignment is not proposed to be moved farther west from the residences along Myrtle Avenue as suggested.

- 180.5. Also, Alternative III for a retained cut would ruin the SSF City Orange Park which is our only major recreational-park area [and open space] in that vicinity.

**Response.** Table 5.3 in the Section 4 (f) Evaluation of the DEIR/Technical Appendix notes that Orange Memorial Park may experience a constructive use. A constructive use would occur because the proximity of the alignment to the park creates impacts such that the protected activities, features or attributes that qualify the park for protection under Section 4 (f) are substantially impaired. There is no "take" at the Park, and impacts are not permanent.

181. MUZZI, VINCENT A.

- 181.1. I believe that if BART must come into Millbrae, that this is the best location for it and that Alternative VI as proposed offers a good solution. As I understand this proposal, it does not propose to condemn any business or property west of the existing CalTrain right-of-way to accommodate the new station, parking or access.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process. Some right-of-way would be required west of CalTrain for a Station entrance. This can be seen in Volume IV, Design Appendix of this FEIR/FEIS.

- 181.2. The City of Millbrae's preliminary station/parking/access alternative concept plan...illustrates how added BART improvements in Millbrae's redevelopment area between El Camino and the CalTrain right-of-way may mitigate traffic and other impacts of the current BART station proposal shown in Alternative VI....Our business and all our property on Serra Avenue would be condemned to accommodate this proposal....Unless we are able to obtain assurance of relocation to a comparable site so as to be made whole by the BART Extension Project, we must object to the City's proposed mitigation concept plan.

**Response.** Any displacement would be mitigated in accordance with appropriate state and federal laws as described on page 3.2-57 of the DEIR/Technical Appendix.

182. NEIRBY, TAMERA

- 182.1. Alternative VI - Bored Tunnel is the only alternative that will provide the quality of transportation that people want without destroying the quality of life that San Bruno families and businesses need and deserve.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA, which includes a subway alignment through this area. Please refer to Response 2.7 for a discussion of the LPA selection process.

183. NEPOTE, PAUL

- 183.1. I support Alternative VI.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the selection process).

184. NIELSEN, JEAN

- 184.1. As BART makes plans to extend service into the San Francisco Airport I find myself thinking that this will be great service to the public....The idea of going directly to the airport is very appealing to me, even if it means a slightly longer trip.

**Response.** The commentor's support for the BART extension to the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (please refer to Response 2.7 for a discussion of the LPA selection process). The LPA incorporates a BART extension into the airport and an ALRS to the terminals.

185. NORTON, SONYA

- 185.1. I went to Millbrae Nursery School for two years....I think it would be a mistake if you closed Millbrae Nursery School down.

**Response.** Please refer to Response 165.1 for a discussion of the displacement of the Millbrae Nursery School.

186. O'MOHONY, ROSALIE M.

- 186.1. [The] Public Open-House Events...segment fails to record Burlingame's Open House for our community at BIS on June 29.

**Response.** Burlingame's Open House on June 29, 1995 was hosted by the City of Burlingame, and BART was invited to attend and respond to inquiries.

- 186.2. To provide expanded bus-service to BART, SamTrans would eliminate most of its express service to downtown San Francisco. This adversely affects SamTrans, as well as communities now receiving express service; in particular, elimination of the 5M route would gravely affect Burlingame citizens depending on this bus-line to get to work; it would, in fact, hurt users in every city to [the] south also.

**Response.** Elimination of SamTrans express service to downtown San Francisco was not assumed under the BART build alternatives in the DEIR/SDEIS except for changes assumed with the opening of the Colma BART station and SamTrans Route 19F. Route 19F was changed from four bus trips to downtown San Francisco during both the A.M. and P.M. peak to feeder service to the end-of-the-line BART station, such as the Millbrae Avenue Station under Alternative VI and the Alternative VI Aerial Design Option. SamTrans Route 5M was not assumed to be eliminated under any of the BART build alternatives although its headway was assumed to increase from 5 minutes to 12 minutes. Please refer to Response 14.29 for further discussion of the changes made in SamTrans bus service as part of the modeling assumptions under the BART build alternative compared to the No Build Alternative.

- 186.3. The draft [Summary DEIR/SDEIS] states that the various alternatives do not impact the surrounding communities since the transfers all occur within the station boundaries. The report does not take into account that - besides transfers - there are also entering riders who have driven or were driven to the respective stations through the very communities the report fails to register an impact within.

**Response.** Extensive analysis was performed to assess traffic impacts resulting from BART patrons who access stations by auto. The traffic sections in the Summary DEIR/SDEIS and the DEIR/Technical Appendix describe these impacts. The reference to transfers in Comment 186.3 is to transfers between difference transit systems. Such transfers do not involve the automobile.

- 186.4. Table 3.1-5 [on page 3.1-14 of the Summary DEIR/SDEIS]: The 1993 daily intermodal number of transfers between BART CalTrain would be 19,900 passengers at Millbrae Avenue, the study assumes. Yet, current daily ridership on CalTrain averages 20,800, according to page 3.1-3. On what premise are these figures based? Are they predicated on no extension of CalTrain to the Market Street area? If not, on what are these figures based? Provide a break-down and rationale.

**Response.** The transfers between BART and CalTrain in 1993 under Alternative VI is forecasted to be 19,900 and the CalTrain ridership in 1993 under Alternative VI is forecasted to be 36,500 boardings compared to 20,800 boardings in 1993 under the No Build Alternative. MTC's mode choice model, the regionally approved model for forecasting transit patronage, was used to

forecast transfers between different transit systems. The San Francisco terminus of CalTrain was 4th and Townsend Streets for the transportation analysis in the DEIR/SDEIS. Please refer to Response 11.6 for a discussion of the CalTrain Downtown Extension.

- 186.5. The El Camino Real - Millbrae Avenue intersections would deteriorate from LOS D to E. No feasible mitigation is said to be possible. A reasonable mitigation would be a smaller garage capacity of 1,000 cars at Millbrae Avenue. Such density would be more in keeping with the nature of the south side of the car park, which, as the EIR says is "small-scale industrial facilities."

**Response.** The parking demand for the end-of-the-line station in Millbrae under Alternative VI was forecasted by MTC's regionally-approved mode choice model and a subarea model. Based on the forecasts for MTC's model, if the parking facilities were reduced to the suggested 1,000 parking spaces, then serious spillover parking problems as well as other traffic-related impacts would occur in the vicinity of the Millbrae Station.

- 186.6. The Millbrae Intermodal Station, under Alternatives IV and V does not have sufficient parking. The estimated 520 excess parkers - the mitigation suggests - can divert to the Colma or the San Bruno station because they have adequate parking. This is not a solution, since it drives drivers back onto the streets in search of another BART parking space.

**Response.** Please refer to Response 16.45 for a discussion of parking impacts at the Millbrae Intermodal Station under Alternatives IV and V.

- 186.7. Parking should be restricted to not more than 24 hours in all BART parking lots to ensure that short-term airport passengers do not use these car parks.

**Response.** Overnight parking will be restricted at all stations along the BART extension. Please refer to Response 10.10 for a discussion of the potential for the one-day air passenger to park at certain BART stations rather than park in airport lots and BART's strategy for prevention.

- 186.8. It is incorrect that the Burlingame General Plan was approved in 1968. It is also incorrect that the General Plan was last amended in the mid-80's. Note: (1) Burlingame's General Plan was adopted October, 1969; (2) The City's Housing Element of the General Plan was amended June, 1994 (and certified by the State December, 1994.)

**Response.** Thank you for providing the information on the Burlingame General Plan. The first sentence of the text regarding Burlingame on page 3.2-31 of the DEIR/Technical Appendix is modified to indicate that the Burlingame General Plan was adopted in 1969, and that the Housing Element was amended in June 1994 and certified by the state in December 1994.

- 186.9. As Burlingame's General Plan pertains to BART, "the rapid transit line should be completely grade separated,...and prevent adverse visual impact on the community." BART should be underground through every community through which it might pass. A tailtrack in Burlingame should be completely hidden by undergrounding or by berm. In case of berm, it should be constructed west of S.P. tracks the length of the project, and of sufficient height, to muffle sound and to keep the tracks out of view.

**Response.** Please refer to Response 14.47 regarding the effects of the tailtracks. The Burlingame General Plan calls for a rapid transit line that is "grade separated;" this is not equivalent to being underground as suggested by the commentator. Grade separation refers to intersection of the rapid transit line with the other transportation corridor, designed so that neither interferes with the operation of the other. The rapid transit line could be below or above the other transportation corridor.

- 186.10. The east side of the SPTCo right-of-way in north Burlingame is characterized by low profile, small-scale industrial facilities. A parking lot of the magnitude BART proposes at Millbrae Avenue is inappropriate compared with the "low profile" City of Burlingame facilities just to the south.

**Response.** The Millbrae Station parking lot would be partly on the site of the existing Hertz sales lot, and the proposed structure would be farther north and farther from the low profile, small-scale industrial facilities in Burlingame. These industrial uses would also be screened from the BART Station and parking by the Millbrae Avenue overcrossing which is under construction over the existing railroad tracks. Please refer to Response 16.35, 16.72 and 16.75 for a discussion of scale.

BART's four-story parking structure is designed to reduce property acquisition, minimizing relocation impacts in local neighborhoods. Landscaping and building architecture will be part of the overall visual mitigation implemented by BART.

Please refer to Response 16.76 for a description of the modified Millbrae Avenue Station under the Aerial Design Option LPA.

- 186.11. Technical Appendix (page 3.3-28)...incorrectly describes Rollins Road as a two-lane road. Rollins Road is a four-lane road from Broadway to Millbrae Avenue.

**Response.** Thank you for providing the information on Rollins Road. Rollins Road is a four-lane road between Broadway and Millbrae Avenue. Page 3.3-28, paragraph one, sentence one of the DEIR/Technical Appendix, is amended as follows:

Rollins Road is a ~~two-~~ four-lane road which runs through an industrial and office area.

- 186.12. The visual setting along the west side of California Drive is correctly characterized as commercial and office....This is an overlay zone....A multi-housing project is currently under construction at 1733 California Drive, directly across from the tailtracks in Alternative VI.

**Response.** The west side of California Drive is characterized as commercial and office. There are also small parking structures and several vacant parcels, one of which is under construction for hospital-related elderly housing. Please refer to Response 14.53 regarding visual and noise impacts to the congregate care facility along California Drive.

- 186.13. [DEIR/]Technical Appendix [page] 3.9-4 [and] 3.2-33 "No residential neighborhoods adjacent to..." is incorrect....The residents of the northern end of Burlingame Village (Dufferin Street homes are within 1,000 feet from the tailtrack area)...will be subjected to unacceptable noise levels, particularly at night. Note the noise-levels in the EIR are inappropriate there.

**Response.** The closest residences on Dufferin and California would be approximately 450 feet beyond the end of the proposed BART tailtrack in Burlingame. At this distance, BART train noise would not result in a significant impact for the residences indicated. The noise levels from BART vehicles operating in the tailtrack would be less than the noise from automobiles and other vehicles traveling on California Drive and much less than other ambient noises in the area such as CalTrain, jets and city buses.

- 186.14. [DEIR/]Technical Appendix [page] 3.9-18: "Sensitive receptors are more than 150' from alignment." Is that true for Care West or for 1733?

**Response.** As indicated in the Design Appendix drawings showing the proposed alignment, BART vehicles would be approximately 160 feet away from Care West nursing home (and similarly from 1733 California Drive). BART cars would travel very slowly in the proposed

tailtrack section such that BART vehicle noise level would not exceed 70 dBA at Care West for which a significance criterion of 75 dBA is appropriate. Other noise sources in the area are estimated to produce the following noise levels at Care West: CalTrain (80 to 85 dBA), jet aircraft (75 to 85 dBA), and city buses (78 to 82 dBA), the levels of which would be noisier than BART. Please refer also to Response 14.53.

- 186.15. [DEIR/JTechnical Appendix [pages] 3.9-85 [and] 3.13-26: The draft quotes the Burlingame noise element levels for commercial and industrial areas but not for residential areas. This addition should be made in the FEIR/FEIS, in light of the Burlingame Village community and future communities in the newly-defined overlay zone. Appropriate mitigation should be made, e.g., undergrounding the tailtrack area.

**Response.** The existing ambient noise environment along the west side of California Drive is characterized by an  $L_{dn}$  of 74 dBA. BART's contribution to this would be less than 1 dBA due to the slow speed of BART trains in the tailtrack section (end of the line) and the distance to sensitive receptors.

An increase in the  $L_{dn}$  of less than 1 dBA would not constitute a significant noise impact for the existing and future residences along California Drive.

The reference to the Burlingame Noise Element occurs on page 3.9-86 and not the pages indicated in this comment. In the area of the proposed tailtracks in Burlingame, the existing ambient noise as characterized by the noise measurement at Care West ranges from  $L_{dn}$  65 to 74 dBA (refer to Table 3.9-2 in the Technical Appendix). This is above the noise level that the Burlingame Noise Element considers appropriate for residential land use.

BART's contribution to the noise exposure (i.e.,  $L_{dn}$ ) in this area would be less than 1 dBA. This is due to the slow speed of the BART trains in the tailtrack section (which is the end of the line) and the distance between the tracks and the noise sensitive receptors in this area (e.g., Care West). An increase in  $L_{dn}$  of less than 1 dBA would not constitute a significant noise impact for the existing and future residential buildings along California Drive in Burlingame.

- 186.16. Activity in the tailtrack and the pit area needs to be described with some detail, particularly between the hours of 2:00 - 6:00 A.M., especially in light of the above written pledge of March 25, 1994. This memo tacitly guarantees no coupling of cars. This should be confirmed in the FEIR.

**Response.** Please refer to Response 14.77 for a discussion of the tailtrack area use.

- 186.17. [DEIR/JTechnical Appendix [page] 3.3-90: "Trees may be removed on the east side of the tailtracks." Tree removal is subject to Burlingame's Tree Ordinance. Trees are one of the distinguishing characteristics of our city and are, therefore, protected.

**Response.** Trees are recognized as visual amenities in Burlingame. Please refer to Response 36.1 for related discussion on removal of trees on the east side of proposed BART facilities.

- 186.18. [DEIR/JTechnical Appendix [pages] 3.1-103 [and] 3.1-117: The TSM Alternative would decrease all freeway traffic both north and south....Freeway 101 from Millbrae Avenue through Third Avenue would degenerate significantly in both the A.M. and P.M. peak hours. The report states that the projects are not the cause of this degeneration. These two stated cases are contradictory. Indeed, the effect of Millbrae Avenue as a BART parking entry/exit point must be analyzed once more for the Final Draft EIR. It appears that a north-end "piece-wise solution" is bumping traffic southward. Burlingame and our neighbor San Mateo will be particularly adversely affected.

- Response.** Significant traffic impacts to Highway 101 described on pages 3.1-103 and 3.1-117 in the DEIR/Technical Appendix are due to different reasons. The significant freeway impacts to the two segments south of the SFIA on page 3.1-103 are related to specific BART build alternatives in 1993, which are hypothetical cases used to analyze the impacts of the project without the impacts from background traffic. Growth in background traffic, i.e., increase in traffic due to population and/or employment growth, is the cause for the significant freeway impacts described on page 3.1-117. This impact to Highway 101 occurs without implementation of the BART extension. The impacts of the Millbrae Avenue Station under Alternative VI were analyzed completely and discussed in the DEIR/SDEIS, including the traffic impacts of the parking facilities.
- 186.19. Figure II, page 137 [of the Design Appendix]: This figure contains a note "exit ramp south (Highway 101 at Millbrae Avenue) to be modified by the City of Millbrae." Since the ramp comes off a state highway, why is a local municipality the modifier?
- Response.** The City of Millbrae has applied for funding of the project to change the southbound off-ramps at the Millbrae Interchange of Highway 101 under the Intermodal Surface Transportation and Efficiency Act (ISTEA). The engineering designs and construction of this project will be conducted by the City of Millbrae in coordination with Caltrans.
- 186.20. Table 3.1-73 [of the DEIR/Technical Appendix]: Under Alternative VI, El Camino Real & Millbrae Avenue would deteriorate to LOS D in both A.M. and P.M. peak hours. The regional model (MTC) does not account for the domino effect this will have on neighboring intersections, e.g., on El Camino Real & Trousdale (B LOS), El Camino Real & Marchison (A LOS), or El Camino Real & Broadway Avenue (A LOS).
- Response.** Traffic impacts to local intersections were analyzed by using a subarea traffic model that assigned the vehicle trips forecasted by MTC's travel demand model. The subarea model contains much more details on the local street network than is contained in MTC's regional model. Traffic assignments for the A.M. and P.M. peak hours were performed to analyze traffic impacts to the street network in the study area which included intersections in the vicinity of the El Camino Real/Millbrae intersection. The impacts to these intersections were studied in detail and the levels of service are summarized in Appendix C of the DEIR/Technical Appendix.
- 186.21. Construction of [the] Millbrae Avenue grade separation project will lead some of its users to reach 101 via California and Broadway, and this spill-over needs to be reckoned with in determining the latter intersection's LOS, should an Alternative VI project become the locally preferred alternative.
- Response.** The subarea traffic model discussed in Response 186.20 included the Millbrae Avenue railroad grade separation project. The California/Broadway intersection was analyzed and the levels of service are summarized in Appendix C of the DEIR/Technical Appendix. The level of service (LOS) at the intersection of California/Broadway is forecasted to be LOS D during the A.M. peak hour and LOS E during the P.M. peak hour in analysis year 2010 under the No Build, TSM Alternative, Alternative VI and the Alternative VI Aerial Design Option. Traffic under Alternative VI or the Alternative VI Aerial Design Option would not have a cumulative impact to traffic operations at this intersection. Please refer to Response 14.33 for a discussion of cumulative impacts to the intersection of California/Broadway under the No Build Alternative. Please note that the Millbrae Avenue grade separation project will disconnect California Avenue from Millbrae Avenue.
- 186.22. Rollins Road & Millbrae Avenue...has...been characterized (wrongly) as a two-lane road. The EIR analysis is in conflict with traffic figures taken there a few years back (resource: City of Millbrae). Local traffic data on this intersection coupled with its incorrect characterization, as well as the fact that it is one of Burlingame's pivotal warehouse & industrial areas call for a revision of the traffic analysis of Table C-24 in [of the DEIR/Technical Appendix].

- Response.** Neither Millbrae Avenue or Rollins Road were analyzed as two-lane roads in calculating the level of service at intersections that involved either roadway. Comparisons have been made between the analysis of the Millbrae/Rollins intersections in the BART extension DEIR/SDEIS and the SFIA Expansion Master Plan EIR and the volumes were found to be similar although the levels of service were different. The methodology used to analyze the level of service at intersections in the BART extension DEIR/SDEIS conforms to the methodology used in the San Mateo County Congestion Management Plan.
- 186.23. BART is asked to conduct a traffic study of the two intersections at Burlingame's Rollins Road; at California & Broadway, and at Trousdale and El Camino to determine the adverse effects of Alternative VI on north Burlingame.
- Response.** The intersections of California/Broadway and El Camino Real/Trousdale were analyzed in the DEIR/SDEIS and the levels of service are summarized in Appendix C of the DEIR/Technical Appendix. Please refer to Response 186.21 for a discussion of the level of service at the intersection of California/Broadway in 2010. The level of service at the intersection of El Camino Real/Trousdale would be LOS C during the A.M. peak hour and LOS B during the P.M. peak hour under Alternative VI and the Alternative VI Aerial Design Option in 2010 compared to LOS A during the A.M. peak hour and LOS B during the P.M. peak hour under the No Build Alternative in 2010.
- 186.24. A BART car-park exit on Adrian Road is unacceptable because of the increased traffic it would spill onto California Drive, and Rollins Road in both directions. Re-evaluation is needed in light of the following adverse impacts, i.e., (1) the traffic needs of residential properties, (2) the increased traffic on Millbrae Avenue from east and west due to BART station Alternative VI and 3,000 car park north of Millbrae Avenue, [and] (3) entrance to the car-park immediately adjacent to Rollins Road, and the near-certain use of Rollins Road, between Broadway & Millbrae Avenue, by potential car-park users....
- Response.** The revised concept plan for the Millbrae Avenue Station includes an exit on Adrian Road. The connection to Adrian Road would be from a roadway within the station footprint that parallels the CalTrain right-of-way and only permits vehicles exiting the station to connect to Adrian. The original design of the Millbrae Avenue Station did not include such a connection to Adrian Road but was suggested by the City of Millbrae. Please refer to Response 16.26 for a discussion of the traffic impacts related to this exit onto Adrian Road. Please note that an exit onto Adrian Road does not impact California Drive because the two roadways are physically separated by the CalTrain railroad tracks.
- 186.25. [DEIR/]Technical Appendix [page] 3-13-155: "El Portal Canal (at our city limits) will not be affected by tailtrack construction." FEIR/FEIS should provide proof of confirmation of this affirmation. The canal is in the 100-year floodplain.
- Response.** Mitigation Measures 3.1 and 3.2 recommended under Alternative VI, Dry Season Construction, would maintain unobstructed drainageways and reduce impacts to an insignificant level. Under the Aerial Design Option LPA, BART plans to relocate drainage channels and extend culverts to maintain existing drainage volumes and flows, thereby reducing the potential impact to El Portal Canal to a less than significant level.
- 186.26. Figure 11, page 137 [of the Design Appendix]: [the DEIR/Technical Appendix] needs to provide assurances for the SP tracks. (These tracks cross over the path the tailtrack would take.)

**Response.** The existing SPTCo freight spur tracks east of the CalTrain main tracks as shown on Figure 11, page 137, of the Design Appendix, must be abandoned where they cross the new BART tracks and facilities. Presently, the drill track is embargoed from use by SPTCo. Discussions with the PCJPB have indicated that installation of necessary switching at this location would conflict with operating criteria for CalTrain. If or when the drill track were placed into service before

construction begins of the BART-SFIA Extension, the rail spur would need to be altered to allow freight service and avoid a significant impact.

- 186.27. [DEIR/]Technical Appendix [page] 3.5-16: "Police departments could consider restructuring beats, shifting responsibility for administrative tasks to civilians currently on city staff, and encouraging neighborhood surveillance programs. Similarly, fire departments could consider station relocation to improve service, on-site fire-protection devices and interlocking signal systems to facilitate emergency response." Burlingame police cannot assume this proposed new responsibility.

**Response.** The measures identified by the commentor were suggestions to address cumulative impacts that stem from both the BART extension and projected development in the City of Burlingame. Based on experiences in other communities now served by BART, the increase in police and fire demand may or may not trigger the need for additional staff or equipment in Burlingame. Likewise, the increase in population for the City by 2010 is projected to be minimal (two percent over 1993 estimated population), so that the cumulative demand from BART and City growth may be relatively limited and none of those measures would be warranted.

Please also see responses 14.57 and 14.59 for a discussion of locally borne emergency service costs.

- 186.28. [DEIR/]Technical Appendix [page] 6.9: In 1990 SamTrans agreed to "pay 25 percent of all FTA-eligible expenses on BART's Colma and San Francisco Airport extensions." "Eligible expenses" needs to be spelled out in detail. Are they all aspects of construction: design, engineering, equipment, administration, eminent domain costs, other land costs, insurance...?

**Response.** Eligible expenses and all other terms are spelled out in detail in the Comprehensive Agreement Pertaining to the BART Extension, signed March 1990 by BART and SamTrans.

In general, eligible costs are those that are defined in the project description and the project budget, are necessary to complete the project, are reasonable, and are satisfactorily documented. Bond interest and other financing costs are allowable costs.

- 186.29. The proposed project Report estimates SamTrans' contributions to be \$196.9 million. How was this amount determined?

**Response.** Please refer to Response 72.347 for a discussion of the source of the SamTrans contribution to the project.

- 186.30. What is the rationale for the assumption that \$9.3 million per annum is adequate for SamTrans' tri-pronged role under this agreement's scenario? (The roles of operating and managing SamTrans bus system, CalTrain and BART.)

**Response.** Please refer to Response 10.1 for a discussion of SamTrans's commitment to the project and its ability to support existing programs in addition to the BART project.

- 186.31. Rev. 7.9: Principles of environmental justice have not been applied to Alternative VI and the Millbrae Gardens neighborhood with the same evenness that these principles have been applied to the Fifth Addition.

**Response.** Please refer to Response 14.101.

- 186.32. Demolishing their [Millbrae Gardens and Fifth Addition] residences is in violation of Executive Order 12898 of February 11, 1994; it is unfair treatment of minorities who are not able to defend

their rights, and "out of the loop" for local lobbying contacts. Alternative VI would demolish 208 households of 525 residents and businesses employing 40 people. Operation of Alternative VI would affect 5 Millbrae neighborhoods. It would directly affect the north Rollins Road industrial properties, the newly-created residential district immediately west of California Drive, as well as residential areas in the Village, and west of the Plaza. Alternative VI is, therefore, not suitable for the Millbrae Avenue location.

**Response.** Please refer to Responses 14.101 and 14.102 regarding Alternative VI and Executive Order 12898. The environmental justice analysis has been performed in compliance with the President's Executive Order and DOT's Environmental Justice Strategy. Please refer to Response 3.12. In this regard, it should be noted that BART and SamTrans have, as explained in the DEIR/SDEIS, involved all the communities along the path of the extension--and in particular those that are high-minority and/or low-income--that are potentially affected by the extension.

#### 187. OKKEN, CHARLES

- 187.1. We absolutely don't want BART to destroy a whole section of San Bruno or cut our city in two above ground.

**Response.** The commentor's opposition to the BART extension through San Bruno is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (please refer to Response 2.7 for a discussion of the LPA selection process). The new LPA incorporates a subway design along most of the proposed route, with the exception of the Tanforan Station vicinity (at which the line is slightly below grade) and the final segment approaching the airport (which has an aerial configuration).

- 187.2. Make BART all under ground starting at San Bruno City limits directly to the airport.

**Response.** The commentor's opposition to the BART extension through San Bruno is noted. Please refer to Response 187.1 for a discussion of the new LPA.

- 187.3. Going down the center of Highway 280 would [be] a sensible way.

**Response.** I-280 was not designed nor constructed with a median wide enough for a BART transit line. Please refer to Response 101.3 for a discussion of a BART alignment in the center of I-280.

#### 188. PACHECO, JOE AND CHRISTINE

- 188.1. When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course, will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto Hickey impossible.

**Response.** Please refer to Response 80.1 for a discussion of left turns onto Hickey Boulevard.

- 188.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure on the Hickey Boulevard extension.

188.3. I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will have the least impact with respect to noise and vibration.

**Response.** The commentor's preference for the proposed project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process). The new LPA incorporates a subway design along most of the proposed route, with the exception of the Tanforan Station vicinity (at which the line is slightly below grade) and the final segment approaching the airport (which has an aerial configuration).

189. PALMIERI, GAIL

189.1. Will the service be as good as the 5M [SamTrans route], or will it take a lot more time to get where I'm going? Will I have to pay two fares where I now pay one? Where is my free choice? [The] choice is the 5M [SamTrans route].

**Response.** Service on SamTrans Route 5M was not assumed to be eliminated under any of the BART build alternatives although its headway was assumed to increase from 5 minutes to 12 minutes. Please refer to Response 14.29 for further discussion of the changes made in SamTrans bus service as part of the modeling assumptions under the BART build alternative compared to the No Build Alternative. Any changes to SamTrans routes must first be proposed and then discussed in public hearings held by SamTrans before such changes are implemented. Patrons riding on SamTrans and transferring to BART would be required to pay two separate fares.

190. PARKER, SHERWOOD

190.1. In deciding whether to turn BART through the airport, or to miss, the experience of New York and London can provide a valuable lesson....London's line goes to the middle of Heathrow, just as BART might; New York's missed, just as is now proposed for the BART extension....Measured by the number of people deciding to use each line, London's worked; New York's didn't.

**Response.** The commentor's support for the BART extension to the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (please refer to Response 2.7 for a discussion of the LPA selection process). The LPA incorporates a BART extension into the airport and an ALRS to the terminals.

191. PENINSULA TEMPLE SHOLOM

191.1. I...express my concern concerning the loss of tranquillity in the area and the loss of a sense of peace at the times of funerals and visitations by families. I urge that trains run in a subway tunnel beneath the cemeteries.

**Response.** The commentor's preference for BART trains to run in a subway configuration beneath the cemeteries is noted.

Based on the environmental information in the DEIR/SDEIS and on a preliminary evaluation of comments received, the BART and SamTrans boards selected Alternative VI Aerial Design Option as the new LPA on November 28, 1995 for advancement to further preliminary engineering and environmental evaluation. The new LPA and all other BART build alternatives except for Alternative III are in a subway configuration through the cemetery area. Alternative III is in a below grade open retained cut configuration through the cemetery area. The noise and

vibration impacts in Colma of Alternative III are described on pages 3.9-35 and 3.9-36 of the DEIR/Technical Appendix.

## 192. PET WORLD

- 192.1. We are being told that a cut-and-cover tunnel construction will cause disruption for at least 2-3 years. This will cause severe economic hardship to my business, my customers, [and] my employees. I...support...a bored tunnel through San Bruno. I believe it is our only alternative. I do not support any cut-and-cover or any equivalent of a cut-and-cover construction proposal.

**Response.** The commentor's preference for a bored tunnel through San Bruno is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process). The bored tunnel option was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

## 193. PINCUS, MELVIN

- 193.1. Bringing BART to the Peninsula will really open up opportunities to me.

**Response.** The commentor's general support for the project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (please refer to Response 2.7 for a discussion of the LPA selection process).

- 193.2. Alternative VI is a window of opportunity for virtually every resident of Millbrae.

**Response.** The commentor's support for Alternative VI is noted. Please refer to Response 193.1 for a discussion of the selection of Alternative VI.

## 194. RADEBAUGH, GLORIA

- 194.1. [I am i]n favor of Alternative VI but wish tunneling.

**Response.** The commentor's preference for the proposed project is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process). Although both boards have concluded that a bored tunnel design is not cost effective (please refer to, for example, Response 17.68), the new LPA incorporates a subway design along most of the proposed route.

## 195. RASMUSSEN, HENNING C.

- 195.1. I...urge BART to adopt a bored tunnel construction plan through downtown San Bruno. I am opposed to the currently proposed alternatives that include a cut-and-cover plan.

**Response.** The commentor's preference for a bored tunnel through San Bruno is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA

selection process). The bored tunnel option was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

196. RIVASPLATA, CHARLES R.

- 196.1. First, I commend BART and its consultants on a very extensive outreach effort. You have successfully engaged Peninsula residents and communities in ongoing debate over which alternatives best maintain economic vitality while providing the greatest degree of benefit for the least economic and social cost.

**Response.** The commentor's favorable opinion of BART's outreach efforts is noted, and appreciated.

- 196.2. I wish to briefly comment on the LPA, identifying its weakness and citing the benefits of adopting an alternative that incorporates elements of Alternative V-A and VI...The LPA should be rejected because it does not satisfactorily resolve the following issues: direct, unimpeded access to airport terminals;...direct, local and regional integration of transport modes;...proximity and access to established city centers;...preservation of environmentally-sensitive areas;...local circulation and parking demand....[Alternatives] V-A and VI would provide features that in the long term could give local jurisdictions better control over land use and transport planning in their communities.

**Response.** The commentor's opposition to the proposed project and preference for Design Option V-A and Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).

197. ROBBINS, DOROTHY

- 197.1. I strongly support Alternative VI which goes directly to the airport and will provide the least amount of disruption to the people in Colma, South San Francisco and San Bruno.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (which included direct airport access) as the LPA (please refer to Response 2.7 for a discussion of the selection process).

- 197.2. For us, the CalTrain is not a good alternative, because the South San Francisco CalTrain station is on the other side of San Bruno Mountain.

**Response.** The commentor's apparent opposition to the TSM Alternative is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (please refer to Response 2.7 for a discussion of the selection process).

- 197.3. If Alternative VI provides too much congestion for Millbrae, consider reducing the parking there.

**Response.** Please refer to Response 186.5 for a discussion of parking at the Millbrae Avenue Station.

198. ROMAINE, ANN

- 198.1. I see great wisdom in the TSM...alternative - with NO extension of BART beyond Colma, letting SFO put in their ALRS and let[ing] CalTrain increase and upgrade their service.

**Response.** The commentor's preference for the TSM Alternative is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. As discussed in Response 2.7, the LPA would not preclude CalTrain improvements. Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18.

- 198.2. Very few in this Pen[insula] corridor of SSF to San Mateo would use or benefit from [the] BART VI alternative....The cost...of BART alternative VI far outweighs any benefits it would bestow....

**Response.** Please refer to Response 2.7 for a discussion of the selection of alternatives considered during the EIR/EIS process.

BART daily patronage under Alternative VI in the year 2010 is projected to be 67,400 at the four stations proposed along the BART-San Francisco Airport Extension. These trips would represent benefits to residents and business on the Peninsula.

199. ROMAINE, RONALD D.

- 199.1. I strongly support BART's Alternative...II!...Alternative II is less hectic to me personally than BART's Alternative...VI and much less expensive! (...our street would be regraded and disrupted in order to build a tunnel under the CalTrain tracks at Hillcrest).

**Response.** The commentor's preference for the TSM Alternative is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. An undercrossing will separate the new Hillcrest entrance from both BART and CalTrain tracks.

200. ROMINO, JOSEPHINE

- 200.1. I am very concerned about the impact of additional traffic occurring on Hickey Boulevard....Is there consideration of a signal at Longford and Hickey Boulevard to allow residents to be able to leave and return in a safe manner, rather than the risky manner that is now in place? Have you counted the number of accidents that are happening both at the Serramonte offramp signal as well as at the Junipero Serra signal?

**Response.** The intersection of Hickey/Longford was not analyzed in the DEIR/SDEIS because of its distances from the proposed Hickey Station. Based on critical review for potential adverse impacts, this intersection was not requested for inclusion by staff from the City of South San Francisco. The majority of the additional traffic on Hickey Boulevard under the BART build alternative results from the extension of Hickey Boulevard rather the Hickey Station. The number of vehicles destined for the Hickey Station under Alternative VI in 2010, that are added to Hickey Boulevard during the A.M. peak hour is 60 eastbound vehicles in the vicinity of Longford Drive. Please refer to Response 15.1 for a discussion of the traffic impacts on Hickey Boulevard related to the Hickey Station compared to the impacts related to the Hickey Boulevard extension. Traffic accidents were not counted nor analyzed at either the Serramonte off-ramp signal or the Junipero

Serra signal. Very few BART-related vehicles are expected to use the Serramonte/Junipero Serra intersection to access the Hickey Station.

- 200.2. Has the Dunman Way Bridge been reinforced or inspected for proper safety to endure the additional vibration (not to mention added fumes) from the added traffic that will be occurring with the anticipated establishment of the Hickey Station?

**Response.** The Dunman Way Bridge has not been inspected as part of the current environmental analysis of the proposed BART extension. However, the traffic impacts on Hickey Boulevard between I-280 and El Camino Real, which includes the intersection with Dunman Way, would not be significant under any of the BART build alternatives. Please refer to Responses 15.1 and 200.1 for further discussion of the traffic impacts on Hickey Boulevard.

## 201. RON PRICE MOTORS

- 201.1. We...lease land owned by Southern Pacific Railroad...[and] a small parcel form the San Francisco Water Department....Both of these parcels are located on Antoinette Lane. Does BART plan on attempting to acquire in full or in part any of these storage areas mentioned for the BART extension? I am specifically referring to the Southern Pacific parcel and the San Francisco Water Department parcel.

**Response.** The automobile storage lot near the end of Antoinette Lane will be temporarily displaced by the BART alignment for a period of approximately 2.5 years.

- 201.2. Assuming BART will not need any of these car storage areas, will use of them be restricted any way during construction?

**Response.** Please refer to Response 201.1.

- 201.3. How will the public access to [Ron Price Motors] be affected during construction of the rail line at Chestnut...?

**Response.** Roadway lane closure and detours are described on page 3.13-9 of the DEIR/Technical Appendix and summarized in Table 3.13-2 on page 3.13-10. During the construction of the cut-and-cover subway across Chestnut Avenue, traffic would be maintained for this street by decking over the construction area, one-half of the total street width at a time. Traffic, including turn lanes, would be re-directed over the remaining half of the traffic area. After the initial one-half of the decking is in place, the traffic, including turn lanes, would be re-directed to the decked area. Decking would then be placed over the BART construction area in that half of the street. The decking would extend the full width of the existing traveled area plus a four-foot width for pedestrians along each side of the street. Traffic would use this decked area for the length of the construction period. After the subway box is complete and the trenching has been back-filled, the paved street and pedestrian areas would be restored to their former width and condition, one-half of the street width at a time.

## 202. ROSENSWEIG, TERESA

- 202.1. Please do not eliminate the Millbrae Nursery School by using plans IV and V to extend BART to the airport.

**Response.** The Millbrae Nursery School would be displaced only under Alternatives IV and V, as well as under Design Options V-A and V-B. These and other impacts were considered by the BART and SamTrans boards during the LPA selection process in November 1995 (please refer to

Response 2.7 for a discussion of the LPA selection process). The Alternative VI Aerial Design Option selected as the LPA by both boards would not displace the nursery school.

203. ROSENTHAL, LEON E.

- 203.1. I...advocate extending BART into the San Francisco Airport Terminal.

**Response.** The commentor's support for the BART extension to the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (please refer to Response 2.7 for a discussion of the LPA selection process). The LPA incorporates a BART extension into the airport and an ALRS to the terminals.

204. RUSSO, SUSAN AND RON

- 204.1. We feel that if BART must go to the Airport, it should do so with the least impact to residences. Therefore, we recommend that Alternative VI be chosen...CalTrain is the best way with Alternative VI as backup.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (which included direct airport access) as the LPA (please refer to Response 2.7 for a discussion of the LPA selection process).

205. SAN BRUNO CLEANERS AND LAUNDERETTE

- 205.1. If the BART extension to the San Francisco International Airport comes through San Bruno, and if the surface streets are broken up during construction,...[San Bruno Cleaners and Laundrette] will be severely impacted.

**Response.** Businesses on San Bruno Avenue may be disrupted by construction under Alternatives IV and V. Please refer to pages 3.13-60 and 3.13-62 of the DEIR/Technical Appendix for additional details.

- 205.2. If the BART line goes through San Bruno, it must be done in a bored tunnel.

**Response.** The commentor's preference for a bored tunnel through San Bruno is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The bored tunnel option was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

206. SAN BRUNO RESIDENTS (6 PEOPLE)

- 206.1. [Alternatives] IV and V, would involve the complete loss of the Millbrae Nursery School, its outstanding play yard, plus heritage trees.

**Response.** The Millbrae Nursery School would be displaced only under Alternatives IV and V, as well as under Design Options V-A and V-B. These and other impacts were considered by the BART and SamTrans boards during the LPA selection process in November 1995 (see Response

2.7). The Alternative VI Aerial Design Option selected as the LPA by both boards would not displace the nursery school.

## 207. SAUNDERS, DOLORES

- 207.1. Page S-2 [of the Executive Summary] shows that there is no trajectory alternative for the City of South San Francisco, (with the exception of No Build)....BART knows its trajectory, knows it is not penetrating industrial area- yet has never offered an alternative path to the City of South San Francisco.

**Response.** In 1972, the San Francisco - Airport Access Project evaluated three corridors from Daly City to SFO through South San Francisco, as described on page 2-99 of the DEIR/Technical Appendix. The three corridors evaluated were 1) Muni corridor adjacent to the SPTCo San Bruno branch right-of-way; 2) the Colma Creek corridor; and 3) the I-280 to I-380 corridor. During the study, the SFAAP Board of Control selected the corridor adjacent to the SPTCo San Bruno Branch for continued study and rejected the Colma Creek and I-280 to I-380 corridors from further study. The Colma Creek corridor was rejected because of poor foundation and construction conditions, and because it would traverse Orange Memorial Park. The I-280 to I-380 corridor was rejected because of engineering difficulties, site access problems, possible highway relocations, and because the aesthetic impact of various transit structures on the existing freeway was deemed undesirable. The corridor considered for the BART extension through South San Francisco has long focused on the Muni/Southern Pacific San Bruno Branch.

The scoping and screening process for the DEIR/SDEIS, as described on page 2-111, also evaluated proposed Alternative XII - BART Hillside Boulevard Alignment to Gateway and Shearwater Redevelopment Projects and an intermodal station west of Highway 101. This alternative was rejected by the Steering Committee on August 20, 1993 because of significant potential for adverse impacts to cemeteries and because it is unlikely that BART would be able to acquire cemetery rights-of-way.

At the August 20, 1993 BART extension Advisory and Steering Committee meetings, representatives of the City of South San Francisco requested staff to analyze two Colma Creek Corridor alignments within the City of South San Francisco; one along Railroad Avenue, and the other along the Colma Creek/Canal Street alignment. The City of South San Francisco proposed these alignments because it would provide a Produce Station in the industrial employment area east of Highway 101. BART and SamTrans staff did not recommend these alternatives for further study because 1) the Colma Creek/Canal Street alignment would be cut-and-cover subway construction through Orange Avenue City Park and would have significant environmental impacts during construction, such as noise and dust, closure of a portion of the park, and an extensive amount of excavation, forming and concrete pouring for the subway structure; 2) the Railroad Avenue Alignment would have significant noise and vibration and visual impacts on Orange Avenue Park and on a residential community north of Railroad Avenue; these impacts are avoided by the proposed project alignment through South San Francisco; and 3) with elimination of the Hickey Station, the City's strategy to fund the difference between the retained cut Base Case alignment and a subway alignment with the tax increment from the El Camino Real Redevelopment Area is not feasible because redevelopment in the area was predicated on development of a Hickey Station and associated high density development.

At the October 18, 1993 BART extension Joint Steering and Advisory Committee meeting, the Steering and Advisory Committees accepted staff's recommendation to delete the Colma Creek/Canal Street and Railroad Avenue alignments from further study. For additional information on the Colma Creek alternatives see the BART extension Screening of Alternatives Report, August 1993.

- 207.2. Please spell out in figures (dollars) the cost difference between the various alignments offered by BART and the subway to be paid for by local financial contributions.

**Response.** Table 6-1 of the DEIR/SDEIS outlines the costs associated with each alternative. Please refer to Response 19.21 for a discussion of the roles of the cities in funding the project.

- 207.3. Please give cost per mile breakdown, from Colma to Tanforan.

**Response.** Please see Response 13.2 for a discussion of the level of detail available in the conceptual cost estimates.

- 207.4. I am writing to you because something about the aerial configuration is really haunting me....The Embarcadero freeway ran the full length of the Embarcadero...hanging like a cement curtain isolating the City from the waterfront and blocking spectacular bay views.

**Response.** Aerial segments of some of the alternative proposals may have greater visual impacts than below or at-grade configurations. These impacts of dividing existing communities, obstructing views, and introducing physical and visual barriers must be balanced with other constraints, i.e., conflicts with existing land uses and infrastructure, that had to be considered in developing the various alternative configurations. The visual impacts associated with aerial segments are discussed in Section 3.3 of the DEIR/Technical Appendix and are relevant to the Base Case Alternative, Alternative IV and Design Option V-A.

- 207.5. With renewed awareness that we too live in quake country could you please tell me, what is the difference between BART's aerial configurations and [that in Kobe, Japan].

**Response.** The design reinforcing of BART aerial structure concrete columns requires code level confinement steel around the main longitudinal reinforcing. The confinement improves the structural qualities of the column's concrete core, which is a very important feature when subject to high earthquake loads.

Failure did occur in some supporting columns for elevated rail and roadways in the Great Hanshin Earthquake of 1995 which occurred in Kobe, Japan, due to inadequate confinement of reinforcing steel. BART design criteria require spiral reinforcement to prevent this type of damage.

In the October 1989 Loma Prieta earthquake BART was the only major transportation system which remained in full service. The core of BART's 72 mile system is made up of approximately 24 miles of aerial structure which behaved extremely well during the earthquake.

208. SCHMIDT, ALFRED C.

- 208.1. I favor Alternative II (Transportation Systems Management) because running BART beyond Colma is a luxury that the residents of the West Bay Counties cannot afford, and will produce few benefits in relation to its cost.

**Response.** The commentor's preference for Alternative II is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

- 208.2. Building the CalTrain downtown extension is much more important because it will (a) benefit the entire Peninsula, (b) help to reduce traffic on Highway 101, which is our biggest problem, and (c) can serve as the West Bay portion of BART.

**Response.** The commentor's preference for Alternative II is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design

Option as the LPA. As discussed in Response 2.7, the LPA would not preclude improvements to CalTrain, including extension of CalTrain into downtown San Francisco. See Response 79.18 for a discussion of background studies demonstrating the need for a rail project south of Colma.

- 208.3. If funds are left over after building the CalTrain downtown extension, the only additional BART construction that should be considered on the Peninsula is a variation of Alternative V-B, in which an intermodal station is located north of I-380....

**Response.** The commentor's preference for Design Option V-B is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. As discussed in Response 2.7, the LPA would not preclude improvements to CalTrain, including extension of CalTrain into downtown San Francisco.

209. SCHONIG, B.

- 209.1. I note that there are no plans or proposals to institute an intersection at the T-shaped corner of Camaritas and Hickey Blvd....When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto Hickey virtually impossible.

**Response.** Please refer to Response 80.1 for a discussion of left turns into Hickey Boulevard.

- 209.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure on the Hickey Boulevard Extension.

- 209.3. If the decision is made to build BART station, I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will have the least impact with respect to noise and vibration.

**Response.** The commentor's preference for the proposed project (the 1992 LPA) is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The new LPA incorporates a subway design along most of the proposed route, with the exception of the Tanforan Station vicinity (at which the line is slightly below grade) and the final segment approaching the airport (which has an aerial configuration).

210. SCHULZ, TIMOTHY

- 210.1. One of my concerns is traffic control....Regardless of the location of the BART station in South San Francisco, the intersection of Chestnut and El Camino Real and Hickey and El Camino Real will deteriorate beyond Level of Service "F."....The BART/SFO alternatives will increase my commute time to that of a much longer freeway commute. It seems to me that increased traffic delays undermine the entire idea of BART (Bay Area Rapid Transit)....

**Response.** The intersections of Chestnut (Westborough)/El Camino Real and El Camino Real/Hickey were analyzed in the DEIR/SDEIS and the levels of service are summarized in Appendix C of the DEIR/Technical Appendix. Both intersections would operate at acceptable levels of service under all BART build alternatives. The Hickey Extension between El Camino

Real and Hillside was included in analysis of all the alternatives except the No Build Alternative; this Extension reduces traffic congestion at the Westborough/El Camino Real intersection. The BART build alternatives would reduce the number of northbound vehicles on Highway 101 north of the SFIA during the A.M. peak hour and would add very few southbound vehicles during the A.M. peak hour. The commute time on Highway 101 for residents of South San Francisco would be improved or unaffected by the BART build alternatives.

- 210.2. The EIR did not address any of the residential streets which may also be affected. One such street is Camaritas, as it intersects Hickey Boulevard a few hundred feet west of El Camino Real (at Chevy's restaurant). It intersects Hickey in a 'T' shape from the south. There are currently no stop signs or lights on Hickey Boulevard at this juncture, making it difficult and even dangerous to make a left turn onto Hickey from Camaritas during peak traffic periods.

**Response.** Please refer to Response 80.1 for a discussion of left turns into Hickey Boulevard.

- 210.3. Either station in South San Francisco (Chestnut or Hickey Blvd. Extension) will approximately double traffic levels on Hickey, and a left turn onto Hickey from Camaritas will be virtually impossible during peak periods unless a stop sign or light is installed at this intersection.

**Response.** Please refer to Response 80.1 for a discussion of left turns into Hickey Boulevard.

- 210.4. The local public safety services (i.e., police, fire, etc.) may be adversely affected by increased responsibilities resulting from the BART station....BART stations have a demonstrated higher rate of crime on the premises. This could also affect the safety of children walking to school.

**Response.** Please refer to Responses 14.57, 16.2 and 16.7 for a discussion of BART impacts on security and measures to mitigate potential increase in crime.

- 210.5. The proposed BART station will affect the safety, health, and quality of life of the residents of this area, [and thus] property values will also be affected. The EIR fails to address the effect that the proposed station would have.

**Response.** No negative impacts on the area west of El Camino Real in South San Francisco, or along the rest of the alignment were found.

- 210.6. I fail to understand why there is a need for a station in South San Francisco with these other stations [Colma and San Bruno] so close (the Colma station would be less than 2 miles away). I would like to suggest that the BART station not be built in South San Francisco...[If] there is a station in South San Francisco, the BART tracks should be under ground (subway design) in order to avoid excessive noise and vibration.

**Response.** The commentor's opposition to the construction of a BART station in South San Francisco is noted. Under the LPA selected by the BART and SamTrans boards in November 1995 (the Alternative VI Aerial Design Option), there would be two stations located near the borders of South San Francisco -- Hickey Station on the northern border and Tanforan Station on the southern border).

## 211. SCHWARTZ, RICHARD

- 211.1. As a BART station on Millbrae avenue would be the terminus of the line and located only one block from Highway 101, a very large number of cars coming from the south will exit the highway each morning to connect with BART....It is inevitable that there will be huge congestion on all roads leading to a Millbrae Station including the Millbrae and the Burlingame portions of El

Camino Real, California Drive, and Rollins Avenue in addition to Millbrae Avenue and Highway 101.

**Response.** Please refer to Response 10.17 for a discussion of traffic impacts at the Millbrae Avenue Interchange with Highway 101; to Response 10.15 for a discussion of traffic impacts related to the Millbrae Avenue and Rollins Road intersection; to Response 16.9 for a discussion of traffic impacts related to vehicles using local streets between I-280 and the Millbrae Avenue Station under Alternative VI; and to Response 16.27 for a discussion of traffic impacts along California Drive in the vicinity of the Millbrae Avenue Station under Alternative VI.

Traffic impacts in the vicinity of the proposed Millbrae Avenue Station under Alternative VI and the Alternative VI Aerial Design Option were analyzed very carefully and thoroughly. Many intersections in the vicinity of this station were analyzed and only the intersection of El Camino Real/Millbrae would have a significant impact under Alternative VI and the Alternative VI Aerial Design Option. Please refer to Response 6.6 for further discussion of the El Camino Real/Millbrae intersection.

- 211.2. As a result of the traffic gridlock on Highway 101 south of Millbrae Avenue which will occur as a direct result of all of the proposed BART build alternatives, especially the proposed station on Millbrae Avenue (Alternative VI), substantial freeway traffic will be diverted off of Highway 101 at the Millbrae Avenue and Broadway Avenue freeway exists, further exacerbating the gridlock traffic on these surface streets. This is not mentioned in the DEIR/SDEIS.

**Response.** Please refer to Responses 14.39 to 14.41 for a discussion of traffic diverted to Rollins Road in Burlingame and the impacts at the intersections of Rollins/Broadway and Californian/Broadway under Alternative VI.

- 211.3. Many commuters who currently use highway 280 to commute to San Francisco will exit at Trousdale Drive to link up with BART. As such, it is likely there will be considerable, perhaps extensive, "highway" traffic on Trousdale Drive both in the morning and in the afternoon commute hours; this is not mentioned in the DEIR/SDEIS.

**Response.** Please refer to Response 16.18 for a discussion of traffic impacts on Trousdale Avenue from vehicles traveling between I-280 and the Millbrae Avenue Station under Alternative VI.

- 211.4. Many commuters from North Burlingame currently use Millbrae Avenue as their principal access to Highway 101. With the predictable gridlock that a Millbrae BART station will create, many of these commuters will divert to the outgoing Broadway access to Highway 101, creating major congestion on Broadway as well....This subject is not mentioned in the DEIR/SDEIS at all despite its major impact on traffic flow through the Broadway district. I believe the end result will be gridlock on Broadway Avenue in Burlingame as well.

**Response.** Traffic assignments made to analyze traffic impacts of all alternatives considered changes in choice of routes as a result of congestion. Please refer to Responses 14.39 and 14.41 for a discussion of traffic impacts for Rollins/Broadway and California/Broadway. The intersection of El Camino Real/Broadway was also analyzed, and no significant traffic impacts were found under any of the BART build alternatives. Level of service results are summarized in Appendix C of the DEIR/Technical Appendix.

- 211.5. A 3,500 space parking lot on Millbrae is totally out of keeping with the area. One only need look at the parking lot being constructed in Colma to envision what the Millbrae lot will look like.

**Response.** Please refer to Responses 16.35, 16.75 and 16.76 for discussion of the visual impact of the Millbrae parking structure.

- 211.6. Even a 3,000+ car garage will be inadequate for the volume which will occur at a Millbrae Station given the proximity to Highway 101 and the airport.

**Response.** The number of parking spaces required to meet the forecasted parking demand at the Millbrae Avenue Station under Alternative VI and the Alternative VI Aerial Design Option were derived from the MTC traffic model and refined by employing a sub-area traffic model of central and northern San Mateo County developed for this study. This model used MTC regional BART patronage projections to derive the number of persons driving to each existing and future BART station. The parking demand will be highest in 2010 compared to 1998 and 2000, and therefore the impact analysis and required mitigation measures addressed the scenario expected in 2010.

- 211.7. It is inevitable that passengers bound for the airport and commuters bound for San Francisco will use the BART parking lot and the entire adjacent area for parking, which will be much cheaper than at the airport and the City, respectively....Some individuals may even choose to park on streets near and adjacent to El Camino and take one of the frequent SamTrans buses to the BART station. It would be a shame if Millbrae and Burlingame have to institute permit parking....

**Response.** Please refer to Response 10.10 for a discussion of air passenger parking at BART stations along the BART extension. Please refer to Responses 14.25 and 14.38 for a discussion of spillover parking and the implementation of a residential permit parking program.

- 211.8. Given the close proximity of the Burlingame Plaza and the Murchison Drive shopping center to the proposed BART station in Millbrae, it is inevitable that many individuals will use these shopping areas as parking lots, both for carpooling and for airport parking. Will pay or permit parking be required in these shopping centers as well?

**Response.** Complaints to local police agencies on spillover parking at the Burlingame Plaza or the Murchison Drive shopping center will be monitored. If spillover parking problems were to occur at these locations a restricted time for parking would be instituted to prevent long-term parking in parking spaces designated for commercial uses. Permit parking would not be instituted in shopping centers' parking facilities.

- 211.9. A BART station on Millbrae Avenue and extension into Burlingame will destroy the Burlingame village area; the proposed BART station on Center Street in Millbrae will similarly have a devastating effect on the surrounding community and is totally inappropriate for the residential nature of the area.

**Response.** The BART extension would involve no land displacement in Burlingame, and that village area would not be directly affected by land acquisition. Traffic congestion in northern Burlingame and spillover parking demand that may displace spaces for local shoppers are addressed in the preceding responses to this comment letter. The Millbrae Avenue Station and tailtracks would not obstruct significant views from Burlingame nor create proximity impacts. In light of these considerations, it is expected that the village area would not change substantially from its present conditions.

- 211.10. If a BART station is constructed adjacent to the Tanforan Shopping Center, it is inevitable that the shopping center parking lot will be utilized by BART patrons as well as passengers bound for the airport.

**Response.** Please refer to Responses 10.10, 14.25, 14.38, and 211.8 for discussions of the impact of air passenger parking and spillover BART parking into local shopping centers.

- 211.11. The goal of mass transit should be to reduce traffic, not to exacerbate it. The gridlock which will occur on Highway 101, especially if a station is built on Millbrae Avenue, will affect tens of thousands of commuters from San Mateo and Santa Clara Counties who use Highway 101

daily....That a system is being proposed and supported by SamTrans which will itself create a traffic nightmare situation and offers nothing for mass transit for San Mateo County south of the airport and all of Santa Clara County is indeed perplexing and indefensible given the mission of SamTrans.

**Response.** The commentor's concern for traffic impacts potentially caused by the project is noted. These and other impacts were considered by the BART and SamTrans boards during the LPA selection process in November 1995 (see Response 2.7). The Alternative VI Aerial Design Option selected as the LPA includes a station at Millbrae Avenue. See Response 10.17 for a discussion of traffic impacts and proposed mitigation activities in the vicinity of the proposed Millbrae Avenue Station.

- 211.12. Alternative II...should be the clear Alternative of choice. The TSM Alternative would be especially well received by all of the communities of the Peninsula and find strong support, especially if it included upgrading the CalTrain system and/or extending it into the downtown area....BART and CalTrain service very different needs, with BART primarily transporting East Bay commuters to San Francisco and CalTrain transporting South Bay and peninsula commuters to the City. As such, the need for a link between the two systems in Millbrae seems questionable at best.

**Response.** The commentor's preference for Alternative II is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). As discussed in Response 2.7, the LPA would not preclude improvements to CalTrain, including extension of CalTrain into downtown San Francisco. See Response 79.18 for a discussion of background studies demonstrating the need for a rail project south of Colma.

- 211.13. The CalBART proposal is highly innovative and has a compelling rationale. It deserves serious consideration as well.

**Response.** Your support for the CalBART proposal is noted. Please refer to Response 13.4 for a discussion of the CalBART proposal.

- 211.14. Alternative VI, in particular, will lead to massive traffic gridlock along Highway 101. It is not too late to reconsider plans which will have such far reaching consequences.

**Response.** The commentor's opposition to Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the selection process). As indicated in Table ES-2 of the FRDEIR/S#2DEIS, Alternative VI Aerial Design Option would have the same impacts on freeway traffic as Alternative VI.

## 212. SENKIN, JEROME

- 212.1. I am opposed to the BART Alternative VI. The traffic, parking, noise, and loss of affordable housing resulting from a Millbrae Station is unacceptable.

**Response.** The commentor's opposition to Alternative VI for the reasons cited is noted. BART is currently working with the City of Millbrae to develop a Millbrae Avenue Station design that avoids or minimizes many of the impacts (please refer to Response 10.18, 16.76, and 16.101 for a discussion of station design modifications proposed by the City of Millbrae). These impacts were considered by the BART and SamTrans boards during the LPA selection process; however, both

boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

## 213. SHANKAR, VISHNU

- 213.1. When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course, will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto Hickey impossible.

**Response.** Please refer to Response 80.1 for a discussion of left turns onto Hickey Boulevard.

- 213.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure on the Hickey Boulevard Extension.

- 213.3. I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will be have the least impact with respect to noise and vibration.

**Response.** The commentor's preference for the proposed project (the 1992 LPA) is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The new LPA incorporates a subway design along most of the proposed route, with the exception of the Tanforan Station vicinity (at which the line is slightly below grade) and the final segment approaching the airport (which has an aerial configuration).

## 214. SILVEIRA, W.M.

- 214.1. The best route for BART from Colma Station to San Francisco International Airport is as follows: 1. Colma Station to Tanforan; 2. From Tanforan, BART should go aerial and turn east parallel to I-380, over San Mateo Avenue, over Highway 101 and then turn south over I-380 and San Bruno Avenue heading for San Francisco Airport Station. A terminal station is already there ready to connect with BART....There is not one single alternative that I can accept....The route that I have outlined above is the only one that makes sense.

**Response.** Elements of the alternative up to turning south over I-380 and San Bruno Avenue that you propose were evaluated as Alternative IV in the DEIR/SDEIS. After turning south over I-380 and San Bruno Avenue you propose a route "heading for the San Francisco Airport Station." You also suggest using the BART trace underneath the short-term parking garage as the terminal station.

An alignment that transitions from aerial to subway after turning south over I-380 and heads southeast towards the center of the Airport short-term parking garage would place an aerial structure in aircraft flight path. An aerial BART alignment across aircraft flight paths and activity areas would violate Federal Aviation Regulations, Part 77, surface restriction lines. This is an infeasible alternative.

## 215. SITIKE COUNSELING CENTER

- 215.1. I have concerns about the impact the construction will have on our Agency [the Sitike Counseling Center]. Sitike is a nonprofit, outpatient substance abuse program. We currently lease two

buildings at 1211 and 1265 Mission in South San Francisco...What consideration is there to the impact of business along Mission Road in terms of noise and safety? Have studies been conducted to determine if the existing buildings can tolerate the pounding and earth movement? We think that our building at 1211 [Mission, SSF] cannot. The building currently shakes and rattles when the train goes by at 10 miles an hour.

**Response.** Construction noise and vibration impacts in the location of the Sitike Counseling Center are described on pages 3.13-165 and 166 of the DEIR/Technical Appendix. If pile drivers (impact or vibratory) are used, there would be the potential for construction vibration impacts of a perceptible nature. Building damage from construction, however, would not be expected. Pile drivers would generate the highest levels of vibration of any construction method. Efforts would be made to avoid displacing the Sitike Counseling Center during construction. If this is not possible, please see Response 215.2 regarding guidelines for relocation assistance followed by BART.

The DEIR/Technical Appendix Construction Section, pages 3.13-165 and 166, discusses construction noise and impacts of pile driving generated by construction activity in this area. For construction noise impacts, implementation of Mitigation Measure 1.1 (i.e. temporary noise barriers) would reduce impacts to below BART's construction criteria. The construction activities and temporary noise barrier would result in temporary significant visual impact.

Impacts and mitigations for pile driving are discussed on page 3.13-166. Mitigation Measures 2.1, 2.2, 2.3, 3.1 and 3.2 (i.e. use of pre-drilled piles, hydraulic pile driver, or shielded pile driver) would reduce this impact to an insignificant level. If, during final design, these measures are found to be unfeasible, the impact of pile drivers would be significant and unavoidable.

- 215.2. Does BART have any plans to assist in re-locating [the Sitike Counseling Center]...?

**Response.** The guidelines for relocation assistance followed by BART are contained within state and federal relocation laws. Since the Center is not expected to be displaced, relocation assistance would not be required.

## 216. SKINNER, JOAN

- 216.1. The BART system should end at the Colma Station, and...any further rail transit development to the south be based on an upgraded CalTrain system within the existing right-of-way.

**Response.** The commentator's support for the TSM Alternative is noted. The BART and SamTrans boards selected the Alternative VI Aerial Design Option as the LPA in November 1995. Response 2.7 describes the LPA selection process and indicates that the LPA does not preclude further improvements to CalTrain. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18.

- 216.2. The draft EIR is inadequate in its evaluation of wetland impact, particularly with regard to the West of 101 parcel currently owned by the San Francisco International Airport. The report does not examine the wetlands as an ecosystem, but attempts to isolate...the endangered and listed species without examining their situation in the context of the adaptive semi-native environment in which they dwell.

**Response.** Construction-related impacts to biological resources are discussed in detail in the DEIR/Technical Appendix on pages 3.13-20 through 3.13-145. Each specific construction impact, including those associated with the west of Bayshore parcel, was addressed in the environmental analysis and in the Biological Assessment. The mitigation plan developed in consultation with the resources agencies proposes appropriate and specific mitigation to avoid, minimize, or compensate for all significant impacts related to construction.

216.3. The technical appendix, while citing possible wildlife and botanical resources in the project corridor does not identify specifically where or in what numbers the species were observed....Certainly the report should identify whether this was at Colma Creek, the west of 101 property, or wherever.

**Response.** Surveys and sitings for Rare, Threatened, and/or Endangered Plants and Animals in the project area are discussed in Appendix D of the project DEIR/Technical Appendix. This appendix sites biological research performed by California Department of Fish and Game and was based on a more detailed information data base, which included non-sensitive species. General vegetation and wildlife surveys were also conducted by MTC in 1990 and 1992 for the AA/DEIS/DEIR.

216.4. There is a question of what numbers of observations at what times during the life cycles of the species listed occurred. For example, the Bay Checkerspot Butterfly is cited as not being associated with the project alignment because "serpentine soils" with which it is associated do not occur within the project alignment, but no actual field studies are cited. In point of fact, I have personally observed the Bay Checkerspot Butterfly within the project alignment.

**Response.** Surveys were conducted at the appropriate times for all sensitive species with the potential to occur in the project corridor. Please refer to Response 216.3 for further discussion of surveys conducted in the project area.

216.5. The report does not adequately survey the endangered and listed species in the project corridor. For example, surveys of the California Red-legged Frog were done during September and October, a dry time of year when frog activity is, by the report's own admission, quite low. The San Francisco Garter Snake was surveyed most recently in 1991, a dry year when poor amphibian food sources for the snakes would logically lead to the survival of fewer individuals after the spring reproductive cycle...It is imperative that a further survey be done now during the rainy year 1995, to obtain an enhanced statistical profile of the SFGS population.

**Response.** As stated in Response 24.59, the USFWS precluded BART from conducting another SFGS survey because USFWS staff believed that the existing data was adequate and that trapping would place the population at risk.

California red-legged frog surveys were conducted in September and October 1993. The objective of the surveys was to determine the presence or absence of the species, not to characterize microhabitat preferences and activity patterns. As a result, the survey findings were conducted at an appropriate time of the year.

Surveys for San Francisco forktail damselfly were conducted in September and October 1993. Surveys were conducted at the appropriate time as other species of damselflies were observed in the area and the forktail damselfly was observed near the project site.

Surveys for California *linderiella* were conducted in mid-March 1994, which indicated that the pools do not have water long enough to support the shrimp. The survey concluded that there was no suitable habitat for the species on the west of Bayshore parcel.

Surveys were not conducted for other sensitive wildlife species in the region due to the absence at any known sensitive species on the west of Bayshore parcel and the lack of suitable habitat within the project corridor. Surveys were conducted during the appropriate bloom times for sensitive plant species which may potentially occur in the area.

216.6. The draft EIR is further inadequate in not addressing, along with the California Red-legged Frog population, the population of Pacific Treefrogs since they are the primary alternative food for the SFGS.

**Response.** The biological surveys in the DEIR/Technical Appendix were conducted to evaluate the status of populations of sensitive species in order to identify the potential impacts of project alternatives and evaluate mitigation measures for three sensitive species. Because of their status, population studies of California red-legged frogs and the pacific treefrog were not required for the EIR. However, mitigation measures aimed at enhancing sensitive habitat include enhancement of breeding areas and habitat of red-legged frogs and other species inhabiting the project area.

- 216.7. The need for action to enhance the survival of the SFGS should not be made contingent of BART having a route south from Colma. Many factors currently threatening the snakes...are now and have been under the total control of the San Francisco International Airport and the City and County of San Francisco to correct.

**Response.** As noted, responsibility for protection or maintenance of this habitat would rest with the property owner and related regulatory agencies. BART involvement in the enhancement of endangered species habitat on the west of Bayshore property is limited to mitigation of potential BART project impacts.

- 216.8. Mitigation measures for the SFGS cited are purely theoretical and dependent on the snakes and their food species adapting to an artificially produced habitat.

**Response.** Please refer to Response 14.68, 41.20 and 107.152 for a discussion of the proposed plan design, and monitoring to mitigate impacts to the SFGS. Please also refer to Response 216.2 for discussion of the forms of impact assessment of sensitive species on the west of Bayshore parcel.

- 216.9. Discussion of the West of 101 property owned by the San Francisco International Airport under land use and economic activity cites the SFIA Master Plan for a future light rail or "people mover" to be built, but does not say what the current use of the property is....It is possible to observe people running, jogging, hiking, riding bicycles and walking dogs on the property on any day that one cares to look. The property is used as a de facto park by locals in all seasons....The surrounding streets and communities would be heavily impacted by the removal of mature vegetation and large trees such as to completely alter the character of simple recreational activities such as walking or biking.

**Response.** The SFIA property is not designated for public use. Little of the land or vegetation would be affected by the proposed airport "people mover."

- 216.10. Woodlawn Cemetery should be added to the list of historical places. Woodlawn contains the graves of historical personages such as Emperor Norton and other graves going back to the time of the San Francisco Earthquake of 1906. The cemetery also contains a large Chinese section dating back to the time of the earthquake.

**Response.** Woodlawn Cemetery may meet the criteria for nomination to the National Register, but because the cemetery is well outside the Area of Potential Effects (APE) for the project, and therefore not impacted by the proposed extension, it has not been analyzed in the DEIR/SDEIS. The commentator or other interested persons may wish to engage the services of a qualified specialist in historic cultural resources to determine the cemetery's eligibility for inclusion on the National Register of Historic Places.

- 216.11. There is virtually no discussion of impacts to my particular neighborhood. I live on Huntington Avenue in San Bruno between Cupid Row and San Felipe, just north of the San Bruno Water Department. By extrapolation, one can conclude that we would be impacted by noise, construction, traffic and all of the impacts associated with the traversing of the SFIA property by BART because of our close proximity to that parcel....There should be specific analysis of the impact of increased traffic the length of Huntington-San Antonio.

**Response.** Noise and vibration impacts for the neighborhood described, which is indicated as the southern end of the San Bruno CBD on page 7-6 (but was included with Lomita Park neighborhood noise and vibration impacts) are discussed in the DEIR/Technical Appendix (see pages 3.9-41, -61, -67, -69, -70 and -82). Effects of noise along Huntington Avenue are discussed in the cumulative noise section, DEIR/Technical Appendix, on page 3.9-32.

Traffic impacts at the intersections of Huntington/Angus, Huntington/San Felipe and San Antonio/Santa Inez were analyzed in the DEIR/SDEIS; these three intersections are in the immediate vicinity of the commentor's neighborhood. No significant traffic impacts were found under any of the BART build alternatives at these three intersections. The level of service results are summarized in Appendix C of the DEIR/Technical Appendix. Please note that intersection number 66 is the intersection of Huntington/San Felipe, although the tables in the DEIR/SDEIS incorrectly labeled it as the intersection of Huntington/Sneath. Please refer to Responses 21.1 and 116.4 for a discussion of traffic impacts along San Antonio Avenue.

## 217. SLAVICK, ROBERT

- 217.1. When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course, will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto...Hickey impossible.

**Response.** Please refer to Response 80.1 for a discussion of left turns onto Hickey Boulevard.

- 217.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure on the Hickey Boulevard Extension.

- 217.3. I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will have the least impact with respect to noise and vibration.

**Response.** The commentor's preference for the proposed project (the 1992 LPA) is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The new LPA incorporates a subway design along most of the proposed route, with the exception of the Tanforan Station vicinity (at which the line is slightly below grade) and the final segment approaching the airport (which has an aerial configuration).

## 218. SMITH, DELANCY

- 218.1. The CalTrain tracks now pass in front of the airport and have a more direct and faster route to S.F. This line should be electrified and brought into downtown S.F....A new CalTrain airport station with a people mover is the logical solution.

**Response.** The commentor's support for the TSM Alternative is noted. The BART and SamTrans boards selected the Alternative VI Aerial Design Option as the LPA in November 1995. Response 2.7 describes the LPA selection process and indicates that the LPA does not preclude further improvements to CalTrain.

219. SMITH, SUSAN M.

- 219.1. It is necessary to assure that no part of the marsh habitat for the San Francisco Garter Snake is impacted by this project. This is an endangered species and endangered type habitat.

**Response.** BART, SamTrans, the FTA and the MTC all considered a number of project alternatives prior to selecting the alternatives presented in the DEIR/SDEIS as the most practicable and feasible. Although Alternative VI, the new locally preferred alternative, would avoid the west of Bayshore parcel and thus not directly disturb any wetland habitats on this property, it would still disturb similar wetland habitats immediately adjacent to the west of Bayshore parcel and thus potentially impact the endangered SFGS. Please refer to Responses 3.1 and 54.11 for further details.

- 219.2. BART into the airport will never be used enough to warrant the cost....It is quite obvious that this type [of] service is rarely convenient for anyone traveling from home with luggage which represents surely a large segment of the airport user population.

**Response.** The commentor's general opposition to the BART extension to the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The LPA incorporates a BART extension into the airport and an ALRS directly to the terminals.

220. ST. BRUNO'S CHURCH

- 220.1. Our position is...that the BART extension to the airport not destroy any homes in the Fifth Addition....As the...Tanforan station and parking facility get developed, we look forward to working out those details with you.

**Response.** Please refer to Response 42.8 for a discussion of potential displacement of residents in the Fifth Addition neighborhood. The City of San Bruno's comment letter, dated March 13, 1995, includes the "Tanforan/BART Concept Plan," jointly submitted by the City and Tanforan Park Shopping Center for the BART Tanforan Station and environs. The commentor is referred to Responses 17.3, 17.4, 17.5, 17.6, 17.7, and 17.53 for additional discussion of "Tanforan/BART Concept Plan." The details of the LPA Tanforan Station will be worked out between the City of San Bruno and BART/SamTrans.

221. STANFORD UNIVERSITY PLANNING OFFICE

- 221.1. We believe that the community services analysis was not adequate because it did not consider the impact to competing public transit systems such as CalTrain and SamTrans. What impact would the BART-SFO project have on ridership numbers and capital and operating budgets for these public services?

**Response.** The impacts to transit services on the Peninsula were carefully considered in analyzing the effects of the BART extension. Ridership numbers for SamTrans bus service and CalTrain service under every alternative in each analysis year are included in Table 3.1-2, Regional Daily Transit Operator Boardings, of the Summary DEIR/SDEIS and in Table 3.1-2, Daily Transit Operator Boardings, of the FRDEIR/S#2DEIS.

Please refer to Response 14.29 for a discussion of the changes made in SamTrans bus service as part of the modeling assumptions under the BART build alternative compared to the No Build

Alternative. Any actual changes to SamTrans routes must first be proposed and then discussed in public hearings held by SamTrans before such changes are implemented.

## 222. STARKIE FAMILY

- 222.1. When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course, will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto Hickey impossible.

**Response.** Please refer to Response 80.1 for a discussion of left turns onto Hickey Boulevard.

- 222.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure on the Hickey Boulevard Extension.

- 222.3. I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will have the least impact with respect to noise and vibration.

**Response.** The commentor's preference for the proposed project (the 1992 LPA) is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The new LPA incorporates a subway design along most of the proposed route, with the exception of the Tanforan Station vicinity (at which the line is slightly below grade) and the final segment approaching the airport (which has an aerial configuration).

## 223. STEPHENS, LOUISE

- 223.1. It is deplorable the way this has dragged on and on. I also was on the mailing list to be notified of BART meetings and some how I am not! I used to receive notices!

**Response.** Ms. Stephens is on the project mailing list and received all mailings of newsletters and notifications of meetings sent to the mailing list. In addition, the public scoping meeting, and four public hearings for the DEIR/SDEIS and FRDEIR/S#2DEIS were notified by press release, corridor postings, and project newsletter. The DEIR/Technical Appendix, Chapter 8 Community Participation documents public outreach through the DEIR/SDEIS public circulation, and the FRDEIR/S#DEIS, Section 1.1 Historical Overview describes public outreach through public circulation of the FRDEIR/S#2DEIS.

## 224. STOCKTON, ROBERT C.

- 224.1. San Bruno Lumber Company objects...to Alternatives IV, V, V-A, V-B where our location is considered for a station location, or where the BART tracks take a route through our property....We also object to...Alternative VI.

**Response.** The commentor's objection to the alternatives listed is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

224.2. Alternative VI...shows a large portion of our property as a "temporary construction easement."...Your comments in the technical appendix on Land Use and Economic Activity (Section 3.2, page 82 [of the DEIR/Technical Appendix]) do not mention displacement of San Bruno Lumber Company and its employees. In section 3.13 page 8 [of the DEIR/Technical Appendix] regarding the land section from Forest Lane to San Bruno Avenue, you make a short comment that the stretch adjacent to the alignment could serve as a staging and access area for construction equipment. We wish to make it clear that even a temporary taking of part or all of our property will permanently damage our business and will result in the permanent loss of jobs.

**Response.** Please refer to Response 66.49 for clarification that BART does not propose to use any of the San Bruno Lumber Yard during construction of Alternative VI. The Yard would be permanently displaced by the construction of the I-380/San Bruno Stations under Alternatives IV and V. Please also refer to Response 2.7 for a discussion of the selection of a new LPA.

## 225. STUDENDORFF, FRANK AND NYLA

225.1. When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course, will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto Hickey impossible.

**Response.** Please refer to Response 80.1 for a discussion of left turns onto Hickey Boulevard.

225.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure on the Hickey Boulevard Extension.

225.3. I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will have the least impact with respect to noise and vibration.

**Response.** The commentor's preference for the proposed project (the 1992 LPA) is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The new LPA incorporates a subway design along most of the proposed route, with the exception of the Tanforan Station vicinity (at which the line is slightly below grade) and the final segment approaching the airport (which has an aerial configuration).

## 226. TILLISCH, KATHY & MICHAEL

226.1. Alternatives] IV and V would involve the complete loss of Millbrae Nursery School, its outstanding play yard, plus heritage trees....See that BART chooses another plan which does not involve the elimination of the nursery school.

**Response.** The Millbrae Nursery School would be displaced only under Alternatives IV and V, as well as under Design Options V-A and V-B. These and other impacts were considered by the BART and SamTrans boards during the LPA selection process in November 1995 (see Response 2.7). The Alternative VI Aerial Design Option selected as the LPA by both boards would not displace the nursery school.

## 227. TOWN COBBLER ORTHOPEDIC SERVICE

- 227.1. I...urge BART to adopt a bored tunnel construction plan through downtown San Bruno. I am told that, currently, a cut-and-cover plan is being suggested -- and I am opposed.

**Response.** The commentor's preference for a bored tunnel through San Bruno is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The bored tunnel option was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

## 228. TREASURE ISLAND MOTEL & TRAILER COURT CORPORATION

- 228.1. The Treasure Island Trailer Court, located at 1690 El Camino Real, South San Francisco will be severely impacted by the proposed BART-San Francisco Airport Extension Project. Treasure Island management and residents are very much opposed to this project unless they can be assured of the following: 1) No property acquisition or displacement of people or living units located in Treasure Island Trailer Court will be required to build this project; 2) Noise and vibration impacts will be mitigated to the maximum extent possible during both the construction phase and after the project is operational; 3) Parking, pedestrian safety and traffic impacts impacting Treasure Island will be addressed and improvements made to minimize these impacts; and 4) Drainage improvements will be made within public streets or BART's rights-of-way to mitigate flooding and drainage problems which BART will cause in this area.

**Response.** The commentor's concern for impacts that affect the Treasure Island Trailer Court is noted. Please refer to Response 228.3 below for a discussion of potential property acquisition and displacement impacts in the Treasure Island Trailer Court. Mitigation measures for potential noise and vibration impacts affecting the Treasure Island Trailer Court are listed in the DEIR/Technical Appendix on pages 3.9-23 and 3.9-24, and 3.9-40 and 3.9-55. Mitigation measures for potential parking impacts to neighborhoods due to BART stations are listed on page 3.1-167.

Please refer to Response 15.4 for a discussion of the Reimer Associates Colma Creek Improvements Validation Study (February 16, 1995). This study examines and recommends improvements to the San Mateo County Flood Control Zone.

- 228.2. [Our] comments and concerns relate to all of the Alignment Alternatives and Design Options presently being considered. Further, if the BART Extension project is to be constructed, it should be in a subway alignment adjacent to the Treasure Island Trailer Court and through most of the City of South San Francisco.

**Response.** The 1995 LPA Aerial Design Option and all other BART build alternatives, except Alternative III Base Case, are in cut-and-cover subway adjacent to the Treasure Island Trailer Court south to Spruce Avenue in South San Francisco. Alternative III is in retained cut adjacent to the Treasure Island Trailer Court. The BART and SamTrans boards of Directors could adopt either a subway alignment as in the 1995 LPA or adopt a retained cut alignment adjacent to Treasure Island Trailer Court under Alternative III. If the retained cut alignment adjacent to the Treasure Island Trailer Court is adopted as part of a project, the BART and SamTrans boards of Directors would need to make a finding of overriding considerations under CEQA.

- 228.3. Treasure Island Trailer Court has the largest concentration of housing for low and moderate income families and individuals along the planned BART Extension route. Many elderly persons occupy these housing units. Treasure Island management and residents have up to now been assured by BART and by State and local elected officials that no property takings or displacement

of living units in the court will be required for this project, regardless of which Alternative is chosen.

**Response.** As noted by the commentor, there would be no displacement of residents of the trailer court. The only need for easements on property currently occupied by units on the San Francisco Water Department property is for subsurface construction easements for tie-back trenching supports. Please refer to Response 19.18 for a discussion of subsurface easements.

229.   TREVINO, SOPHIA LIN

- 229.1.   When and if a Hickey or Chestnut station is built, Hickey Boulevard...will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto Hickey virtually impossible.

**Response.** Please refer to Response 80.1 for a discussion of left turns onto Hickey Boulevard.

- 229.2.   Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure on the Hickey Boulevard Extension.

- 229.3.   If the decision is made to build BART station, I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will have the least impact with respect to noise and vibration.

**Response.** The commentor's preference for the proposed project (the 1992 LPA) is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The new LPA incorporates a subway design along most of the proposed route, with the exception of the Tanforan Station vicinity (at which the line is slightly below grade) and the final segment approaching the airport (which has an aerial configuration).

230.   ULTIMATE FLY SHOP

- 230.1.   During construction...if the streets are torn up and parking becomes a problem, [customers] will simply go elsewhere, and my business will be destroyed....If the project is actually built, and if the line goes through San Bruno, it must be done in a bored tunnel that does not disrupt commerce through the downtown area.

**Response.** The commentor's preference for a bored tunnel through San Bruno is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The bored tunnel option was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

231.   OLIVEIRA, MRS.

- 231.1.   When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course, will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto Hickey impossible.

**Response.** The commentor's preference for the proposed project, the 1992 LPA, is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The new LPA incorporates a subway design along most of the proposed route, with the exception of the Tanforan Station vicinity (at which the line is slightly below grade) and the final segment approaching the airport (which has an aerial configuration).

- 231.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure on the Hickey Boulevard Extension.

- 231.3. I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will have the least impact with respect to noise and vibration.

**Response.** The commentor's preference for the proposed project (the 1992 LPA) is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The new LPA incorporates a subway design along most of the proposed route, with the exception of the Tanforan Station vicinity (at which the line is slightly below grade) and the final segment approaching the airport (which has an aerial configuration).

## 232. UNIDENTIFIABLE

- 232.1. When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course, will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto Hickey impossible.

**Response.** Please refer to Response 80.1 for a discussion of left turns onto Hickey Boulevard.

- 232.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure on the Hickey Boulevard Extension.

- 232.3. I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will have the least impact with respect to noise and vibration.

**Response.** The commentor's preference for the proposed project (the 1992 LPA) is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The new LPA incorporates a subway design along most of the proposed route, with the exception of the Tanforan Station vicinity (at which the line is slightly below grade) and the final segment approaching the airport (which has an aerial configuration).

## 233. UNIDENTIFIABLE

- 233.1. You are taking from us the one thing we do have and value the most: An area of peace and quiet. Tell me, how can you justify this?

**Response.** The commentor's concern that BART would impact the Treasure Island Trailer Court is noted.

## 234. VEAH, MARLENE

- 234.1. When and if a Hickey or Chestnut station is built, Hickey Boulevard, of course, will experience much higher levels of traffic as cars approach the station from Highway 280. This will render a left-hand turn onto Hickey impossible.

**Response.** Please refer to Response 80.1 for a discussion of left turns onto Hickey Boulevard.

- 234.2. Traffic at the Hickey Boulevard/Hickey Extension will be at LOS E levels, with significant delays during peak periods. Part of the report does state that "all-way stop controls" at this intersection would mitigate this situation considerably. I am therefore strongly in favor of such controls.

**Response.** Please refer to Response 80.2 for a discussion of the proposed all-way stop control mitigation measure on the Hickey Boulevard Extension.

- 234.3. I am in favor of the LPA, if only because it calls for BART to have a subway design, which I believe will have the least impact with respect to noise and vibration.

**Response.** Please refer to Response 232.3 for a discussion of noise and vibration.

## 235. VINCENT, DORIS O.

- 235.1. I do not want BART in my neighborhood. With BART comes the problems of losing my home or the value of my property, heavy traffic, parking in the neighborhood, [and] high crime rate, etc....My mother has Alzheimer [disease] and lives at a homecare in Millbrae and BART will be in this neighborhood also disrupting our lives.

**Response.** The commentor's general opposition to the BART extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

## 236. VOYAGER TRAVEL

- 236.1. It is my understanding...that the proposed disruption of traffic on San Bruno Avenue will be for a period of 20 to 30 months! Most of my customers come up from Highway 101 directly on San Bruno Avenue. They rely upon this location to be convenient and easily accessible. This would be a major impact upon my business.

**Response.** If the I-380 San Bruno Station or the Downtown San Bruno Station were to be chosen for construction under Alternatives IV and V as well as Design Options V-A and V-B, San Bruno Avenue would be widened and construction of these improvements to this roadway are projected to require nine to twelve months. This information is presented in the construction schedule on page 3.13-10 in the DEIR/Technical Appendix. Under alternative VI, Aerial Design Option, the only impact to traffic on San Bruno Avenue would be temporary detours while installing decking

that would maintain normal traffic while the subway box is constructed. BART/SamTrans will work closely with property owners and businesses to minimize impacts to property and business operations. Additionally, BART/SamTrans would address demonstrable loss of income due to project construction in accordance with federal and state laws.

- 236.2. If BART intends to build through San Bruno, it must be done in a bored tunnel that goes underground north of the downtown area (north of San Bruno Avenue) and does not resurface until south of Angus Avenue.

**Response.** The commentor's support for the tunnel construction option through the City of San Bruno is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. (Please refer to Response 2.7 for a discussion of the LPA selection process. The bored tunnel option was determined to be infeasible for a number of reasons, as discussed in Response 17.68.)

237. WADDELL, BOB AND BERNHARDT, KATHY K.

- 237.1. We feel [Alternative] VI would be best because it has the most parking spaces.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (which included direct airport access) as the LPA (see Response 2.7 for a discussion of the selection process).

238. WARD, ETHELYN

- 238.1. I am enclosing Summary Alternative V-A marked to show a route I think [is] far [more] preferable....Come out of the Tanforan Station with a subway, if necessary, to avoid homes. Forget the San Bruno Station. Tanforan is San Bruno. Follow along I-380 by the most feasible means, avoiding homes, or tunneling and cross over or under 101 and San Bruno Avenue. Continue along east side of 101 on same route as proposed for Airport Light Rail. End at airport main terminal with a GTC and Intermodal Terminal.

**Response.** The alignment described by the commentor is similar in many respects to Alternative IV, except that it does not return to the CalTrain right-of-way after the Airport Station. Tanforan has been included as a station location because the shopping center represents a major destination and would be a reason for people to use BART service. Please refer to Response 79.6 for a discussion of the merits of extending BART service beyond the SFIA to Millbrae.

- 238.2. We don't need two trains, CalTrain and BART, following the same route down the Peninsula. The peoples' money should not be spent on BART below the airport. CalTrain is continually improving the track and station sites. When this airport connection is finally completed, STOP. CalTrain and the buses are sufficient.

**Response.** The commentor's support for the TSM Alternative is noted. The BART and SamTrans boards selected the Alternative VI Aerial Design Option as the LPA in November 1995. Response 2.7 describes the LPA selection process and indicates that the LPA does not preclude further improvements to CalTrain. (also see Response 107.40-107.43)

- 238.3. Alternative V:...The construction easement appears to cover 1st Avenue. How will those residents get in and out of their homes?

**Response.** 1st Avenue would not be closed under Alternative V, access for residents in the vicinity of 1st Avenue would be maintained during construction under Alternative V.

The primary use for the easement along 1st Avenue is a subsurface easement for the installation of tie-back supports for the trench shoring for the BART subway. The only surface use of an easement would be for any necessary widening or additional paving of the one lane road extending south past the existing homes fronting on 1st Avenue.

238.4. Alternative V....How will the Angus Avenue crossing be handled during and after construction so that residents of Belle Aire can go out of the area, by car and on foot.

**Response.** Traffic on Angus Avenue will be maintained throughout the construction period. Temporary detours will be used to divert traffic during the installation of street decking. This decking will carry normal traffic on the current roadway alignment while the subway box is constructed below.

Please refer to Response 17.65 for more information on the impact to Angus Avenue.

238.5. Alternative V-A 1: Is BART going to buy property just for construction and lay-down area?...What about homeowners' access?...The operating right-of-way will be against the front of the homes on the south portion of 1st near the CalTrain station. How will that be designed?

**Response.** The tracks would be located in a subway. Some of the properties would be inconvenienced during the construction of a temporary deck in 1st Avenue so the subway could be excavated and constructed below the deck. None of the properties are planned to be taken to provide right-of-way or lay-down areas. No fencing would be required. The dashed line showing the limits of a construction easement would be a subsurface easement for "tie-back" anchor rods placed underground to help support the walls of the trench during construction. Please refer to Response 72.290 for details of tie-backs.

238.6. Alternative VA2:...The permanent operating easement takes 1st Avenue....That spends money to acquire residential property.

**Response.** No residential properties will be acquired at this location under Design Option V-A 2. However, a permanent operating subsurface easement would be acquired from owners. Payments would be made and property would remain with the owners. During construction, access to property would be maintained at all times by decking of 1st Street.

238.7. Alternative V-A 1 and 2:...The station right-of-way takes residential property on 1st and 2nd Avenues. I am against any station plan which takes residential property.

**Response.** Design Option V-A #1 and 2 identify a proposed Downtown San Bruno Station or optional I-380 Station both of which require displacement of residents and businesses in downtown San Bruno.

238.8. Any plan that extends BART across Angus Avenue presents an excellent opportunity to reconstruct that awkward and dangerous intersection.

**Response.** The intersection of Angus Avenue and 1st Avenue is a pre-existing problem of which BART is aware. Reconstructing to eliminate current traffic problems at this intersection is, however, beyond the scope of this project. Comments to reconstruct this intersection should be addressed to the City of San Bruno.

239. WARD, JOHN P.

- 239.1. I voiced objections to the location of underground tracks near the North Millbrae Subdivision 1 if Alternative VI were to be selected....I see no reason why the bore and tracks have to be located under the street and front yards of residences on Santa Paula Avenue in North Millbrae Subdivision 1. The potential for vibrations to residences and this neighborhood is entirely too great. This problem can be mitigated easily by moving the bore farther to the southeast.

**Response.** The siting of the alignment is based on engineering requirements. The minimum radius curve for 50 mph design speed is 1,000 feet. Currently, there is a 1,010 feet radius on the easterly (inbound) track. BART is also constrained by the property on Nadina and Aviator Avenues as shown on Figure 9, page 83 of the Design Appendix. A curve would be designed to avoid both of these residential areas as much as possible during preliminary engineering.

Groundborne noise and vibration impacts have been identified for residences on the eastern end of Santa Paula Avenue. Analysis of these impacts for Alternative VI indicates that vibration can be mitigated to an insignificant level by use of in-tunnel or off-site measures. Based on the vibration data available (which is for a tunnel depth approximately one-half that proposed for Alternative VI), a conservative analysis indicates a residual impact from groundborne noise. Further engineering studies would be done during preliminary design for the selected alternative. It is expected that vibration tests done at actual tunnel depths (approximately 60 feet) in the area of the affected residences on Santa Paula Avenue will indicate that both groundborne vibration and noise can be mitigated to an insignificant level by one or more of the measures indicated in Section 3.9 of the DEIR/Technical Appendix.

240. WELCH, JOSEPH W. JR. REAL ESTATE

- 240.1. If BART intends to build through San Bruno, it must be done in a bored tunnel that goes underground north of the downtown area (north of San Bruno Avenue) and does not resurface until south of Angus Avenue.

**Response.** Please refer to Response 236.2 for a discussion of the tunnel construction option through the City of San Bruno.

241. WENDEL ROSEN BLACK & DEAN

- 241.1. The only "build" alternative contained in the DEIR/SDEIS that is acceptable to Tanforan Park is Alternative VI, but only if modified with a BART station integrated into the Tanforan Park Shopping Center....

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (which includes direct airport access) as the LPA (see Response 2.7 for a discussion of the LPA selection process). Under the new LPA, the Tanforan Station would not be located at the Tanforan Park Shopping Center.

- 241.2. We submit that many significant adverse impacts are not properly and adequately assessed in the DEIR/SDEIS, particularly with respect to the related issues of traffic and parking. Both general and specific comments on certain of these subjects are contained within [the] City's comments on the DEIR/SDEIS, and these comments are incorporated herein by reference to the extent that they pertain to Tanforan Park. Such incorporation will avoid the necessity of repeating all of City's comments here at length.

**Response.** Significant impacts related to traffic and parking under all alternatives for all analysis years studied in the DEIR/SDEIS have been properly and adequately studied. All traffic-related and parking-related comments presented by the City of San Bruno to BART on the DEIR/SDEIS have been addressed in response to comment letter 17.

- 241.3. Consider the intersection of El Camino Real with Sneath Lane (which the DEIR/SDEIS does identify as significantly adversely impacted)....The v/c analysis results, which suggest that among fundamentally similar station alternatives, one which is projected to generate more than 100 percent more traffic than another would have identical traffic impact or that one which generates forty percent less traffic than another is projected to have fifty percent more traffic impact, is contrary to reason and logic. Similar patterns of illogical results appear in the findings reported for this intersection in the same peak and forecast year for Alternatives IV, V, V-A and V-B....Similar patterns of illogical results for this location are exhibited in the P.M. peak analyses for the 1998 and 2010 forecast years....The DEIR/SDEIS reports similar illogical v/c findings for the intersections along San Bruno Avenue....For the intersection of San Bruno Avenue with the I-280 northbound ramps in San Mateo, Alternatives V-A and V-B are projected to cause lower v/c utilization than V though they generate twice as much traffic.

**Response.** Please note that the levels of service reported in the DEIR/SDEIS for Alternatives IV and V as well as Design Options V-A and V-B were for the I-380 San Bruno Station option. This station option will divert some vehicles away from the intersection of El Camino Real/Sneath because the station is located to the south of this intersection, as are many of the residences of patrons driving to the BART station in San Bruno. For example, the volume-to-capacity (v/c) ratios increase slightly, or traffic congestion worsens, at the intersection of El Camino Real/San Bruno under Alternatives IV and V and Design Options V-A and V-B. Under these alternatives San Bruno Avenue will be widened between Highway 101 and the BART station, increasing traffic capacity at intersections along this segment of San Bruno Avenue. Another improvement in all of these four alternatives except for Alternative V is that the intersection of San Bruno/Second would be signalized, improving the level of service compared to other alternatives where the intersection is unsignalized. The additional vehicles destined for the San Bruno station under Design Options V-A and V-B compared to Alternative V would access this station from Highway 101 rather than Interstate 280.

- 241.4. The DEIR/SDEIS fails to analyze, disclose and mitigate the impacts of Tanforan BART station traffic on traffic levels of service on streets in the immediate vicinity of the proposed station and the Tanforan Park and Towne Center shopping centers during the December holiday shopping season.

**Response.** The traffic analysis is performed for traffic volumes during an average annual day. The number of parking spaces supplied at the Tanforan BART Station exceeds the forecasted demand in the year 2010 by 20 percent to accommodate this peak demand. The peak of Christmas shopping is generally the day after Thanksgiving and during the weekends prior to the Christmas holiday. These times are off-peak periods for BART usage and BART-related traffic would not create additional traffic congestion. The morning peak period for BART-related traffic occurs before the majority of stores in the Tanforan Park Shopping Center are open. The afternoon peak period during December for BART-related traffic would overlap shopping center activities. The intersection of El Camino Real and Sneath is to be improved as a mitigation if a Tanforan Station were to be built at this location. This intersection would receive additional traffic during the afternoon peak period during the Christmas Holiday season. Huntington Avenue is forecasted to have additional traffic capacity with the Tanforan Station and would serve as an alternative route for BART-related and shopping center-related traffic during the height of the peak period traffic conditions. During the afternoon peak period, the BART-related traffic also serves to attract potential customers to the two shopping centers due to their proximity to the stations. Transportation facilities are seldom sized to meet seasonal peak demand. Even so, BART generally experiences a four percent reduction in patronage during the month of December.

241.5. Because the holiday shopping season traffic impacts were undisclosed in the transportation impact section, the Land Use and Economic Activity section of the DEIR/SDEIS failed to analyze and disclose the potential significant adverse impacts of BART station generated traffic congestion on the economic health of the Tanforan Park and Towne Center retail establishments and the continued stability and viability of these land uses.

**Response.** According to the Bay Area Economic study, San Bruno and the Tanforan Park area have shown strong sales patterns in recent years. In-bound traffic to BART generally occurs before retail centers open; there is some potential for traffic conflicts during the late afternoon commute period, but also potential for BART users to stop and shop at the center. BART usage is generally reduced during the peak holiday shopping period when people take time off from work to complete holiday shopping and be with family. Please refer also to Response 24.14 for a discussion of holiday traffic patterns.

241.6. There is clear potential for traffic, with BART stations located as in the LPA and Alternatives IV, V, V-A and V-B, to cut through Tanforan Park internal circulation roadways as an alternative to using public streets as part of the BART station access/egress pattern. Tanforan's internal circulation roadways are designed for immediate access/egress to its own parking and for traffic behavior characteristics of circulation in a parking lot. Use of these roadways by through traffic exhibiting traffic behavior characteristic of movements on arterial public streets could have significant adverse operational and safety consequences. The DEIR/SDEIS is deficient in failing to disclose this potential adverse impact and to...responsive mitigation.

**Response.** Design Options V-A and V-B do not include a Tanforan Station. The Tanforan Station, in the other options mentioned in Comment 241.6, i.e., 1992 LPA plus Alternatives IV and V, would be located in the Tanforan Shopping Center overflow parking lot, adjacent to the intersection of Huntington/Sneath. Drivers could drive through Tanforan Park Shopping Center, but this "shortcut" could be taken only by northbound vehicles on El Camino Real south of the two shopping center entrances on El Camino Real. The proposed mitigation for the El Camino Real and Sneath Lane intersection would include adding a right-turn-only lane for northbound traffic on El Camino Real turning onto eastbound Sneath Lane. This free right turn lane means that vehicles can turn during all phases of the traffic signal. The travel time of diverting through the shopping center roadways would generally take longer than staying on public roadways.

A queue length analysis for the northbound movement at the El Camino Real/Sneath intersection under Alternative VI in 2010, reveals that the maximum average queue during the A.M. peak hour would be nine cars, about 175 feet, for both the free right turn and the adjacent through lanes. During the P.M. peak hour under Alternative VI in 2010, the queue length would be four cars in the free right turn lane and nine cars for the through lane. In both peak hours, the average queues are less than the typical 200-foot long free right-turn lane and therefore the free right-turn should function effectively.

241.7. The DEIR/SDEIS identifies a significant adverse traffic impact at the intersection of El Camino Real with Sneath Lane. It also identifies as mitigation potential improvements which had been independently identified and explored previously by Tanforan Park and the City of San Bruno and commits that BART will pay its "fair share" for such improvements. The nature of those improvements and "fair share" should be explicitly understood.

**Response.** Please refer to Response 17.48 for a discussion of BART's activity with the City of San Bruno to improve the intersection of El Camino Real and Sneath Lane. Mitigation Measure 5.3 under the 1992 LPA on page 3.1-125 of the DEIR/Technical Appendix states that the intersection improvements at the El Camino Real/Sneath intersection would provide additional lanes on all approaches, including exclusive left turn lanes on Sneath Lane, so that existing split-signal phasing may be removed. Further, it states that the fair share contribution would be based on the direct project impact identified in the 1998 analysis.

241.8. Tanforan stations in the LPA and Alternatives III and VI fail to provide replacement parking dedicated to shoppers for the shopping center parking east of Huntington Avenue displaced by the station facilities.

**Response.** Please refer to Responses 72.144 and 72.150 for a discussion of replacement parking for lost spaces at the Tanforan Shopping Center.

241.9. The DEIR/SDEIS...fails to make any reasonable quantified estimates of the extent normal commuters, midday travelers to downtown San Francisco or airport "day-trippers" will do this, hence failing to disclose the potential significance of this adverse impact. Furthermore, the mitigations suggested for this impact, that Tanforan implement some form of controls over its parking supply, are themselves a significant adverse impact on Tanforan as an undesired administrative burden and cost and/or as elements which might be discouraging to customers and tenants in its retail trade.

**Response.** BART has designed its parking supply at BART stations or mitigated the design to accommodate the anticipated parking demand in the year 2010 as forecasted by MTC's mode choice model and use of a subarea traffic model to determine individual station parking demand. Spillover parking cannot be quantified because the parking supply is adequate to meet the anticipated demand. The DEIR/SDEIS does not suggest that Tanforan Park Shopping Center implement some form of controls over its parking supply as stated in this comment. However, restricted parking zones may be appropriate as mitigation of spillover parking if the monitoring program found that this were to occur within Tanforan Park Shopping Center parking facilities. Such parking zones would encourage turnover of parking spaces over a specified time period and prevent commuters from parking in these spaces. Such restricted parking zones would be confined to areas in proximity to the BART station where spillover parking has been found to be a problem. Such measures would not be performed unilaterally by BART or SamTrans but would occur through negotiations with representatives of Tanforan Park Shopping Center and the City of San Bruno which would administer enforcement.

Please note that the design of the Tanforan BART Station has been modified based on comments from the City of San Bruno and Wendel Rosen Black & Dean. Please refer to Responses 17.4 and 17.5 for further details on revisions to the Tanforan Station.

241.10. The DEIR/SDEIS relies on a theoretical forecast model to judge the adequacy of the proposed parking provisions. Such models are subject to substantial error.

**Response.** The number of vehicles that access the station by auto was determined by MTC's mode choice model, the federally approved model for forecasting these volumes. The number of parking spaces required to meet the forecasted parking demand at every BART-San Francisco Airport Extension station studied were further refined by employing a sub-area traffic model of central and northern San Mateo County developed for this study. This model used MTC regional BART patronage projections to derive the number of persons driving to each existing and future BART station. This method was much more sophisticated than the methods used to estimate the parking requirements for the original BART stations and followed the best professional practices.

241.11. Though the work has forecast those who would use BART as their primary mode for trips to/from the airport, it does not account for those who would travel to the airport by auto as their primary mode but park at a nearby BART station to avoid the costly airport parking charges.

**Response.** Please refer to Response 10.10 for a discussion of the potential for the one-day air passenger to park at certain BART stations rather than park in airport lots and BART's strategy for prevention.

241.12. It is also worthy of note that BART and its consultants had at their disposal superior information than the theoretical forecasts used in this analysis - the actual experience at the line-end and near-to-line-end stations on its other suburban lines....The proposed parking provisions at the combination of Tanforan plus San Francisco Airport Intermodal (3625) or Tanforan plus Millbrae Avenue (4000) seem a vast undersupply. Thus, further analysis and study seem appropriate here.

**Response.** BART has designed its parking supply at BART stations or mitigated the design to accommodate the anticipated parking demand in the year 2010 as forecasted by MTC's mode choice model and use of a sub-area traffic model to determine individual station parking demand. This model used MTC regional BART patronage projections to derive the number of persons driving to each existing and future BART station. The parking demand will be highest in 2010 compared to 1998 and 2000, therefore the impact analysis and required mitigation measures were performed for 2010 when the adverse effects from parking demand would be greatest. Table 3.1-95 (Parking Analysis -2010 Demand, Design as Mitigated) indicates that the parking demand at the Tanforan Station, under analysis alternatives where a station is located at Tanforan (e.g., LPA, Base Case, Alternative VI), does not exceed capacity and adequate on-site parking is provided for BART passengers. Please refer to Response 10.25 for a discussion of possible diversion from the Millbrae Avenue Station due to traffic congestion on Highway 101.

#### 242. WHEELER, JIM

242.1. This BART-SFO DEIR/SDEIS assumes that CalTrain will not be extended into downtown San Francisco! How can BART unilaterally decide that the MTC 1876 agreement no longer applies? This report must be written with the cost and ridership comparisons of both the CalTrain extension and the BART extension.

**Response.** Please refer to Response 11.6 for a discussion of transportation-related impacts to the BART extension with the CalTrain downtown extension.

242.2. SamTrans will pay as much as \$450 million to BART for the "privilege" of extending BART to the Airport and how much does BART put into this project? The answer is zero. BART has a policy of never paying for the construction of any of the BART extensions!

**Response.** San Mateo County has not joined the BART District, and the District is prohibited from spending funds outside its boundaries. Please refer to Response 13.3 for a discussion of the role of SamTrans in funding the project.

242.3. For \$30 million of public money, BART has developed a report that gives BART the answer the BART wants. This report is clearly not in the public interest and is meant only to support BART's desires. \$30 million of public money has been spent on a biased report. Not only is it biased for BART and Alternative VI, it is also biased against CalTrain.

**Response.** Each feasible alternative was analyzed at an equal level of detail. No recommendation regarding a preferred alternative is made. Please refer to Responses 9.1 and 11.6 regarding CalTrain.

242.4. It makes absolutely no sense for BART to run into the Airport and then back out again to Millbrae....Alternative VI is certainly not what a rational transit planner would support. Alternative VI will only add about 7,500 riders more than the other alternatives....

**Response.** Please refer to Response 79.6 for a discussion of the reasons the Airport International and Millbrae Intermodal Stations were both proposed in Alternative VI.

242.5. The question is, why BART when we already have a rail system that can be upgraded to a Peninsula Rapid Transit System for much less money than the BART extension, much less disruption to neighborhoods and businesses, incrementally [deployed] (as money is available) and serve [a] larger population than the BART extension. This report must be rewritten with a modernized CalTrain Rapid Transit System considered.

**Response.** The commentor's support for the TSM Alternative is noted. The BART and SamTrans boards selected the Alternative VI Aerial Design Option as the LPA in November 1995. Response 2.7 describes the LPA selection process and indicates that the LPA does not preclude further improvements to CalTrain. (Please also see Responses 107.40-107.43)

242.6. With Alternative VI...[airport employees] will not be encouraged to use CalTrain/BART because of all the transfers and the resulting waits...Why doesn't Alternative VI include a convenient cross-platform transfer between BART, CalTrain, and the Airport Light Rail System? The ALRS would take employees directly to their work area.

**Response.** Under Alternative VI, MTC projects 13,900 and 5,200 passengers arriving at the Airport from the north and south respectively. Of the total 5,200 patrons arriving from the south by CalTrain at the Millbrae Intermodal Station to ride BART into the Airport, 3,300 would be air passengers and their greeters and only 1,900 would be Airport employees.

Approximately 75 percent (or 3,300) of the air passengers who would come from the south would walk to terminals after existing BART at the International Terminal Station and only 25 percent would transfer to the Airport Light Rail System before reaching their Airport destination located beyond walking distance. Of the 1,900 workers, approximately 760, or 40 percent, would walk to their destination after exiting BART and approximately 1,140, or 60 percent, would transfer to the Airport Light Rail System.

Of the 5,200 air passengers/greeters/workers coming from the south by CalTrain and then using BART to the Airport, 35 percent would make a second transfer onto the Airport Light Rail System and 65 percent would walk to their Airport destination once exiting BART. Approximately 10 percent of the total number of CalTrain daily trips to the Airport Station would be required to make a second transfer.

The 1992 LPA, its I-380 Least-Cost Design Option, and Alternative III involve a connection between BART, CalTrain, and the ALRS outside of the Airport west of Highway 101. For the proposed project and Alternative III Airport Intermodal Station west of Highway 101, 100 percent of all trips to the Airport would need to transfer to the ALRS.

In addition, the Airport Intermodal Station, freeway access ramps, and the ALRS are located in wetlands area which is prime habitat for the San Francisco Garter Snake, an endangered species. Construction of the Airport Station in prime habitat for the San Francisco Garter Snake is problematic. Please refer to Response 107.10 for additional discussion of the difficulties of constructing transit facilities on endangered species habitat.

Since release of the DEIR/SDEIS, BART has continued to explore improved connections between CalTrain and BART by rearranging the station layout to provide direct "cross-platform" transfers. This new design is presented in Volume IV of this FEIR/FEIS. Under Alternative VI, BART serves the SFIA directly so that there is no need for the ALRS to extend west of Highway 101 to a BART/CalTrain/ALRS intermodal station. BART/ALRS transfers would occur at the Airport International Terminal Station.

242.7. The construction and the Operation and Maintenance costs of the proposed BART-SFO extension will have a severe impact on SamTrans' ability to upgrade the existing bus and rail system.

**Response.** Please refer to Response 13.3 for a discussion of the role of SamTrans in supporting the project.

- 242.8. For a report that cost the taxpayers millions of dollars, I would expect a document that compares all alternatives and summarizes them in charts. This report is very difficult to understand and use.

**Response.** The BART extension is a large, complex project and analysis of the proposed alternatives is extensive. The DEIR/SDEIS and DEIR/Technical Appendix treat each alternative independently so that its impacts can be readily identified. Charts are used where appropriate to compare and analyze the project's alternative alignments. A comprehensive comparison of alternatives begins on page 2-77 of the DEIR/Technical Appendix. Features of the alternatives are illustrated in Figure 2.4-1, page 2-80. Table 2.4-1, page 2-81, highlights some of the key differences between the alternatives. Table 2.4-2, pages 2-83 through 2-97 compares key environmental consequences of the various alternatives and highlights unavoidable impacts.

- 242.9. Why does this BART line have to go back out of the Airport and over to Millbrae?

**Response.** Please refer to Response 79.6 for a discussion of the reasons the Airport International and Millbrae Intermodal Stations were both proposed in Alternative VI.

- 242.10. What will be the total cost of the segment between the Airport and the Millbrae CalTrain station?

**Response.** Please see Response 13.2 for a discussion of the level of detail available in the conceptual cost estimates.

- 242.11. What will be the cost per new rider for this segment, if the Airport Light Rail connects with CalTrain?

**Response.** This environmental document for the BART extension does not include analysis of cost-effectiveness indices for the ALRS or CalTrain-related projects. A cost-effectiveness index, for example, cost per new rider, cannot be defined for a segment of a project, such as between the airport and Millbrae Station, because of the overall service provided to an extension by capital costs elements such as systems, vehicles, and engineering services.

- 242.12. The Proposed Alternative 13 (light rail) was not considered for the Colma-SFO transit corridor. BART's reason: "Because this alternative does not permit a BART/CalTrain Intermodal connection, it violates the threshold criteria, and is not recommended for further study." I find this incredible and couldn't believe what I was reading the first time I read it. This means that only BART can be studied for the Colma-SFO transit corridor.

**Response.** Please refer to Response 54.12 for a discussion of Proposed Alternative 13, Light Rail Transit from the Colma BART Station via El Camino Real to I-380 LRT/CalTrain/ALRS Intermodal Station.

- 242.13. The financial plan presented in this report is grossly inadequate. I find it incredible that the DEIS for the CalTrain extension into downtown San Francisco was held up for over a year because it did not include a constrained financial plan and this report is being treated as though there is a financial plan.

**Response.** Please refer to Response 14.92 for a discussion of the CalTrain extension to downtown San Francisco, and 14.93 for a discussion of the financial plan included in the DEIR/SDEIS.

243. WHITE, GEORGE

- 243.1. [I] support the CalTrain/BART concept for inclusion in the SFO Study. A CalTrain relocation is cost effective when spending public monies. This concept is a standard gauge line (4"-8 1/2") about 4 3/4 miles in length, approximately 60 percent at grade, 40 percent underground with a minimum of construction disruption and upheaval....

**Response.** Your support for the CalBART proposal is noted. Your comment focuses on the realignment of CalTrain between Millbrae and South San Francisco via a new subway and at-grade alignment which goes under Highway 101 to serve the Airport proposed new International Terminal and United Airlines Maintenance Center. Please refer to Response 13.4 for a discussion of the CalBART proposal.

244. WOLFFE, VAUGHN

- 244.1. The FTA has allowed the consultants to ignore CalTrain performance upgrades or the extension of CalTrain's San Francisco station to a location closer to downtown San Francisco. While this may be permissible by FTA rules it biases the results of the ridership so as to make those numbers entirely unreliable.

**Response.** Improvements to CalTrain service were included in the TSM Alternative and the BART build alternatives and were excluded from the No Build Alternative. These improvements include the increase of CalTrain service from 60 to 86 daily trips. The CalTrain Downtown Extension was analyzed in the BART extension AA/DEIS/DEIR, published by MTC in 1992. For additional information on the CalTrain Downtown Extension please refer to Response 11.6.

- 244.2. Dynamic modeling is completely dependent upon accurate assumptions about data input....The model is more accurate for transit systems that have regular and even frequencies such as BART. This allows BART to play well to the model since it more closely fits the ideal system the model tries to describe. CalTrain with its scheduled service and express trains requires the model to average performance which in turn produces greater error variance. When this greater error is compounded by assumptions of only 86 trains and no extension of CalTrain then the FTA and the consultants are reporting results that have no validity whatsoever.

**Response.** CalTrain service was modeled by MTC in a manner to maximize the accuracy of their projections. CalTrain service was divided in four separate types of trips in the transit network. Express and local trips for northbound and southbound service were modeled as separate routes, each with its own headways and travel speeds. In this manner, the effect of express trips and local trips were separately evaluated in the transit assignment process. Train service of 86 trains was developed through equilibration of the travel demand model. The MTC model initially used a scenario developed by the JPB of 114 trains per day. However, ridership projections indicated that this level of service was not required. Equilibration of the model brought the service to 86 trains.

- 244.3. The exclusion of BART to Colma's ridership in the TSM calculations when that section is and was already under construction indicates that BART, the FTA and the consultants are attempting to mislead Congress, SamTrans and the people of San Mateo as to the real benefits and costs of this project.

**Response.** The Colma BART Station was not excluded from the TSM Alternative in any of the analysis years. The Colma Station was excluded from the No Build Alternative only in 1993 because the station was not in operation that year. There has been no attempt to misrepresent the findings on the BART extension to Congress, SamTrans or any members of the public.

244.4. It should also be noted that BART ridership has declined since 1990 and CalTrain's has increased. A factor that the model or its assumption do not address. The ridership figures completely ignore recent fare increase for BART which usually detracts from ridership even further.

**Response.** MTC's 1990 model forecasts, which were interpolated with 2010 results for 1993 forecasts used in the DEIR/SDEIS, included trip tables and transit networks that were calibrated to result in accurate estimation of existing BART and CalTrain ridership. Once the model predicts existing conditions accurately, it is able to use the socioeconomic forecast data to predict future ridership with equal accuracy. Certain assumptions about future conditions must be made based on existing information, such as fare levels, population and employment growth. Fares are assumed to increase at the same rate as projected rates of inflation for all services by the year 2010. Population and employment projections are based on ABAG's projections for 2010. The model is not designed to and does not take into account short term variations in ridership caused by fare increases, economic recessions, earthquakes, or other factors. The model is designed to estimate conditions for the long term based on average conditions forecasted for 2010.

244.5. In 2 of the alternatives there are questionable design considerations that have no other purpose but to purposefully degrade CalTrain service even at the expense of BART patrons. In the Base Case under the Conceptual Design Drawings section it indicates that BART is proposing to come from the west, cross over CalTrain (Figures 10, 11 pages 34 and 35) and come to a station position in between CalTrain and the ALRS (Figure 6A page 124). In order to complete this construction this would require the relocation of the CalTrain tracks....In alternative VI access to SFIA by CalTrain riders requires a double transfer to BART and then to the ALRS. Again the only reason for such a prohibitive connection between CalTrain and the ALRS is to hinder CalTrain ridership.

**Response.** In the Base Case, BART crosses over CalTrain tracks in the vicinity of Sylvan Avenue to utilize the unused railroad right-of-way on the east side of the CalTrain tracks. At the proposed intermodal station the BART and CalTrain tracks are at the same elevation while the ALRS tracks are elevated as shown on Figure 6A, page 124 of the Design Appendix. The CalTrain tracks are spread apart for a center platform configuration, but are not depressed below BART tracks.

With respect to Design Options V-A and V-B, neither have an intermodal station at the location in the Base Case. Both these Design Options have downtown San Bruno stations where BART is depressed below CalTrain and the at-grade CalTrain tracks are located between BART and the ALRS, as shown on Figure 5.2A, page 122, of the Design Appendix.

All airport station concepts proposed west of Highway 101 would require minor relocation of CalTrain tracks to accommodate a center platform. BART and the ALRS are on the east side of the tracks in this location since the right-of-way is available. Transfers from CalTrain to BART or the ALRS would be equally convenient, unless the station were redesigned and the CalTrain tracks extensively relocated to provide direct cross-platform transfers. The ALRS could be built in a high profile over the BART and CalTrain platforms; patron access could, however, be more complicated than shown in the DEIR.

CalTrain transfers to BART for access to various locations along the BART route in San Francisco and even the East Bay are far more significant in number than those riders going to SFIA. The Millbrae Station provides for this transfer and further development of this station during preliminary engineering may result in improving the cross-platform movements.

244.6. For the Base Case and the LPA it is not correct to state that a station directly across from SFIA would have significant environmental impacts upon wetland and endangered species habitat. It is not the train station's impact but rather the BART and SamTrans parking lot that causes the environmental impact. Move SamTrans operations to the airport ground transportation center and forget BART's congestion creating parking lot and there would be no impacts.

**Response.** Locating a CalTrain/BART station west of Highway 101 without providing vehicular access or parking would serve no purpose other than transfers between the two rail modes. The end-of-line station would have to be in San Bruno, resulting in substantial congestion and displacement of residences as shown in Alternative V.

Any station construction west of Highway 101 may have impacts on the wetlands and endangered species since building the platform alone would require widening CalTrain tracks and expanding the right-of-way into the wetlands areas. Therefore, eliminating the parking lot would not necessarily eliminate threats to the wetlands and endangered species habitat west of Highway 101.

- 244.7. The DEIR describes the connection between BART's internal station and the ticket counters as a "walk." This is absolutely a lie. Figure 10.B page 36 clearly indicates elevators and escalators are required to reach ticket counters. The same is true to reach the ALRS.

**Response.** The text should be modified to clarify that pedestrian flow between the Alternative VI internal Airport International Terminal Station and airline ticketing counters requires a change of level. On page 2-69, paragraph two, of the DEIR/Technical Appendix sentence two, is revised as follows:

BART passengers could access the Airport International Terminal ticketing area by elevators, escalators, ~~or by~~ and walking (see Figures 2.2-34a and 2.2-34b).

- 244.8. Table 3.1-6 indicates a fairly even patronage of 4400-4500 riders from CalTrain for all alternatives. It makes no consideration of the double transfer for Alternative VI even though a 40 percent drop off per transfer is common. It also indicates BART ridership to SFIA as consistently twice that of CalTrain's even though twice as many airport workers come from the north. Again this is the bias of the model giving incorrect results.

**Response.** Please refer to Response 66.111 for a discussion of the impacts of the double transfer under Alternative VI and the Alternative VI Aerial Design Option. According to Table 3.1-1, SFIA Airline Passenger and Employee Origins, of the DEIR/Technical Appendix, 56.4 percent of SFIA employees live south of the airport, (including those workers living in Alameda County) compared to 40.4 percent of the workers living north of the airport. The results of MTC's travel demand model are not incorrect or biased.

- 244.9. When comparing Table 3.1-5 with Daily Boardings in Table 3.1-2 [of the DEIR/Technical Appendix] (2.9 of the Transportation technical report) it indicates that for Alternative VI in 1998 more than half of CalTrain ridership will transfer to BART at Millbrae. In view of transfer required, the reduced seating on BART, the longer trip to where most CalTrain riders go and the increased cost of the transfer this is clearly a conclusion drawn from faulty or dishonest calculations.

**Response.** The number of predicted transfers between CalTrain and BART are based on MTC's mode choice model, a model that is federally approved for making these forecasts. BART trains would have seating capacity to accommodate the patrons transferring from CalTrain. The travel time on BART is not longer than travel time on CalTrain measuring to the final destination point. BART serves many more neighborhoods of San Francisco than does CalTrain. The cost of traveling on CalTrain to downtown San Francisco compared to traveling on BART may be equivalent, depending upon pricing decisions to be made by SamTrans and the JPB.

- 244.10. The 2nd criteria of the "Threshold Criteria" is the most precise admission by BART and the consultants as to the inferiority of the BART system as a whole....This criteria admits that other systems are superior and thus seeks to eliminate them so as to not preclude the expansion of an inferior and overly expensive BART system.

**Response.** The threshold criterion to accommodate a future BART extension south is completely unrelated to the inferiority or superiority of one transit system over another and does not seek to eliminate other transit systems. Rather this criterion addresses the BART Extension Staging Policy to ensure that BART and non-BART alternatives do not preclude possible future implementation of this policy. The BART Board of Directors have adopted a BART Extension Staging Policy, revised October 25, 1990, which lays out the parameters for BART Extensions. The BART extension is a Phase I Inside Current District Extension, pursuant to the BART/SamTrans Agreement, March 1990. Extensions from Millbrae to Menlo Park and Menlo Park to San Jose are identified as Phase II and III (outside District) planning priorities. Therefore, no alternative should preclude a BART extension farther south. As discussed in Section 2.5 of the DEIR/Technical Appendix, no non-BART alternatives and only one BART alternative was rejected from further study during the DEIR/SDEIS screening process because of this criterion.

In addition, the commentor is referred to Response 107.50 for additional discussion of the criteria to accommodate a future BART extension south.

244.11. Criteria 3 concerning a 2-1/4 minute headways is totally incorrect. I have spoken with the ridership modelers at MTC whose said that they only modeled for 4-1/2 minute headways on this project.

**Response.** The commentor is correct that BART alternatives were modeled by MTC at 4-minute peak period headways as shown in Table 2.2-1 BART Service Summary in the DEIR/Technical Appendix. As discussed in Table 2.5-1, Evaluation of Proposed Alternatives Screening Criteria, a primary goal of the BART 1992 Ten Year Plan, is to reduce transbay and westbay headways (time between trains) to 2- minutes during peaks to accommodate projected future passenger growth and proposed Dublin/Pleasanton to westbay service. BART currently operates the Richmond/Daly City, Concord/Daly City and Fremont/Daly City routes transbay. Maximum operational flexibility would provide for all four routes to operate to the end-of-line of the BART extension station at 2 1/4 minute headways.

#### 245. YOUNGE, FITZROY

245.1. All of the proposed alternatives to date will cause major disruption through the downtown area....I manage a restaurant on El Camino Real in San Bruno. I know that any traffic re-routing will impact this stretch of El Camino Real. Business will be affected....I do not support any cut-and-cover or any equivalent of a cut-and-cover construction proposal. A bored tunnel will avoid any disruption to businesses and residents.

**Response.** The impacts of construction traffic on city streets is discussed in Item 5 on page 3.13-47 of the DEIR/Technical Appendix. The major generator of construction traffic is the excavation of earth from the cut-and-cover subway segments and the bored tunnel segments. The maximum rate of excavation, which occurs on the cut-and-cover subway segments, is 1,000 cubic yard per day. This volume would require 125 truck loads (8 cubic yards per load) per day, which would not add significantly to existing traffic--20-cubic-yard trucks could be used if BART and its construction contractor opt, instead, to use larger trucks to reduce the number of truck loads. As a result, the number of daily truck loads would be reduced from 125 to 50 per day. The construction-related truck routes in the City of San Bruno do not include use of El Camino Real although the route would need to be approved by official representatives of the City. Construction-related impacts to parking along Huntington Avenue that could affect downtown San Bruno businesses is addressed in Response 17.69.

#### 246. YUR DESIGN, INC.; FRASER, SUE AND HUGH

246.1. We open our windows for ventilation. But our windows face the train tracks, directly in front of the proposed cut-and-cover construction. In addition to the inconvenience and disruption of noise and dust, what kind of health hazards will this expose us to?

**Response.** Construction activities are expected to generate emissions of carbon monoxide (CO), ozone precursors (reactive organic gases and oxides of nitrogen), sulfur oxides, and particulate matter. Of these pollutants, CO and respirable particulate matter ( $PM_{10}$ ) are of concern on a local scale, e.g., in the immediate vicinity of construction activities. Emissions of these pollutants will be minimized through employment of best construction practices as described in Responses 19.134 and 79.4. The health effects associated with exposure to these pollutants are described on page 3.10-6 of the DEIR/Technical Appendix.

- 246.2. We definitely support a bored-tunnel construction through San Bruno. We do not support any cut-and-cover or any equivalent of a cut-and-cover construction proposal.

**Response.** The commentor's preference for a bored tunnel through San Bruno is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The bored tunnel option was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

247. ZALESKY, PAULINE

- 247.1. Where is your funding coming from for the BART Extension to the Airport?

**Response.** Please refer the Financial Analysis, Volume I, of the FEIR/FEIS for a discussion of costs and resources for the LPA, and to response 14.93 for a discussion of the proposed financial plan in the DEIR/SDEIS and FRDEIR/S#2DEIS.

248. ZALESKY, WILLIAM

- 248.1. Why is that you are not helping to build up CalTrain in cooperation with BART?

**Response.** The Peninsula Corridor Joint Powers Board (JPB) is the agency responsible for CalTrain. The JPB is currently conducting preliminary engineering and environmental studies for extending CalTrain from its present terminus at 4th and Townsend Streets in San Francisco, to a downtown location. The SamTrans Board of Directors fully supports this efforts.

Please see Response 10.1 for a discussion of SamTrans ability to support CalTrain, bus services, and the BART Extension.

249. ZUTRAUN, HERMANN

- 249.1. BART station at the new International Terminal, Alternative VI: For travelers it's a climb or descent of one hundred and twelve (112) feet, equal to an eleven story building.

**Response.** Please refer to Response 244.7 regarding the vertical distance between the BART platform and the ticketing level in the International Terminal.

- 249.2. Intermodal Station, West of Highway 101: The cost of that station could be considerably reduced by eliminating the use of the ALRS. The concourse at EL-16 and the trestle at EL+23 would be eliminated. Passengers could directly transfer from BART cars to shuttles.

**Response.** If the ALRS did not serve the West of Highway 101 station, all patrons would have to use shuttle buses. The buses would have to return to Highway 101, exit on Millbrae Avenue and backtrack to the terminals. This circuitous routing would result in greatly increased travel times

and would not contribute to improving airport access from the standpoint of reducing the number of rubber-tired vehicles using the existing roadway system.

- 249.3. Airport Light Rail System (ALRS): The ALRS should be replaced by manually driven electric vans. The total cost will be less than the amortization of the \$40 million capital cost of the ALRS plus its maintenance and operation, not listed on Table 6-1 [of the DEIR/Technical Appendix]. The cost for surface roads and an additional overpass at Highway 101 would be relatively small.

**Response.** Please refer to Response to 249.2 for a discussion of the disadvantages of substituting shuttles for the ALRS. Additional ramps over Highway 101 are already required to access the BART Intermodal Station. Providing a third bridge crossing Highway 101 would increase traffic congestion at the critical entry point of the Airport and may not be feasible due to geometric constraints. The design of the ALRS is only conceptual at this time; final details would be developed during the preliminary engineering and final design phases of the project.

- 249.4. The DEIR does not concern itself with the question [of] how passengers will enter the existing BART stations....The airline passengers traveling with bulky baggage and maybe with small children cannot use a majority of the BART stations. These are not equipped to accommodate passenger's transfer from surface travel onto the BART platforms....Elevators have to be added and escalators have to accommodate, and storage space has to be provided for large luggage carts. Special BART gates have to be installed....The BART cars have to be remodeled to provide easy access and space for bulky baggage. The time schedule of trains will be affected, if all trains will run to the Airport.

**Response.** The issue of how to accommodate patrons who use BART from existing stations to access the Airport will be studied further during the preliminary engineering and final design phases of the project. With regard to luggage, many passengers with carry-on bags already use BART. Elevators are provided at all existing stations. The newer BART cars have ample room near exit doors for standing or sitting with luggage. In addition, BART is investigating the possibility of installing special fare gates which permit the passing of luggage through the fare gate at selected stations as well as at the Airport and Millbrae Avenue CalTrain/BART Station. Such gates are in operation today at the Atlanta Hartsfield Airport and some overseas airports that have rail transit service.

- 249.5. The DEIR makes no allowance for the cost of the additional work at the BART stations.

**Response.** It is unclear what "cost of the additional work at the BART stations" refers to. Conceptual cost estimates for the project are shown in the DEIR/Technical Appendix, Table 6-1 and cover all station costs.

Although the stations are not designed to offer "storage space ...for large luggage carts," entrances, exits, elevators, escalators, and fare gates have been designed with airline passengers, as well as handicapped citizens, the elderly, and all other BART patrons, in mind. The cost estimates presented in the Financial Analysis (Chapter 6) of the DEIR/Technical Appendix include complete station design and construction costs.

- 249.6. The cost of the preparation of the DEIR[/Technical Appendix] is not listed on Table 6-1.

**Response.** The cost of preparation of the DEIR/SDEIS is included in total project costs. Preparation of the reports is funded with a federal grant for preliminary engineering and environmental analysis, with the majority of such costs included under the "Engineering Services" line item.

249.7. Table S-3, part of the Executive Summary, lists Daily Patronage, Capital Cost, and Operating and Maintenance Costs....A trip on BART for Alternative VI will cost \$19 +/-, for Alternative V-A \$20 1/2. These dollar amounts are based on a 10 percent amortization of the capital cost, also including the ALRS for Alternative VI; that money has to be amortized too. The amortization has to be taken into account....A few years ago BART forecast 42,976 (!) average daily riders. Using this figure and an increase of the total cost by 15 percent, the cost of a trip for Alternative VI would be about \$30.

**Response.** It is inappropriate to (1) divide total capital costs by annual ridership, (2) amortize the capital investment over ten years, when the Office of Management and Budget life estimate for rail lines is 50 years, (3) include costs for the ALRS without including a figure for ridership, and (4) include ALRS costs for Alternative VI at all since the station location does not require an ALRS extension. Benefits of the investment, in addition to those accruing to riders, include reduced regional congestion, increased air quality, and local employment.

249.8. TSM stands for Transportation Systems Management...including "improving bus and shuttle routes to the Airport." Hopefully, that alternative will put an end to the Alice in Wonderland BART ride into and from the Airport.

**Response.** The commentor's preference for Alternative II is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

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### 3.6 SPEAKERS

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#### S1. ALENTIEV, TIM (3/4/95)

S1.1. I favor Option VI...It would be a big mistake not to have a BART station at the Airport.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (which includes direct airport access) as the LPA. Please refer to Response 2.7 for a discussion of the selection process.

#### S2. ALESNA, LORRAINE (2/15/95)

S2.1. I am in favor of Alternative VI with bored tunneling all the way with no destruction of homes or commercial buildings and...with appropriate federal funding.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). A bored tunnel design was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

S2.2. I would like you to consider the children that do cross over and handicapped people, the senior citizens that...have difficulty climbing stairs.

**Response.** In terms of safety of school children that may be affected by construction activity, the traffic management plan for construction activities will include control of traffic in the vicinity of

construction. Precautions will be taken to provide necessary safeguards for school crossing areas at all impacted intersections during the appropriate periods of every school day. Every BART station has facilities, such as elevators to provide access into and out of stations for physically challenged individuals who may have difficulty climbing stairs or using escalators. The BART-San Francisco Airport Extension stations are required to adhere to the American Disabilities Act (ADA) which would assist children, handicapped individuals, and senior citizens in accessing the stations.

S3. ALLEN, ROBERT (2/15/95, 2/18/95, 3/4/95)

- S3.1. Mr. Allen's oral comments are the same as his written comments. Please see Responses 65.1 through 65.6.

S4. AMSTROP, IRVING (3/4/95)

- S4.1. [The EIR] is very difficult to get.

**Response.** The DEIR/DEIS was made available at 27 local libraries, the Tanforan Community Service Center, as well as the City Manager's office in the Town of Colma, Cities of South San Francisco, San Bruno, Millbrae and Burlingame. The document could also be requested through calling the project hotline number (415-398-2002).

- S4.2. Neighborhood maps of South San Francisco. This is on page 3, Colma on page 2, Millbrae on page 5, and San Bruno on page 4, but nothing for Burlingame, which will be detrimentally affected by the BART project.

**Response.** Please see page 3.2-85 for a discussion of the methodology used to analyze the impacts of the project on existing neighborhoods. No neighborhoods in Burlingame would be significantly impacted by the project. For this reason, no neighborhood map was included in the report.

- S4.3. Trousdale is a steep hill and on one side of the street, we have schools -- the Franklin Elementary, Burlingame Intermediate School, Peninsula Hospital, a convalescent home, and a police station. And on the other side, we have a high school and another convalescent home, and our shopping area.

**Response.** Comment noted.

- S4.4. It will impact police, ambulance, and fire response time for the safety of our citizens by having BART come to the Millbrae Avenue area.

**Response.** Please refer to Responses 14.57 and 14.83 for a discussion of emergency response times.

- S4.5. It will massively affect street erosions, cause pollution and cause us traffic and fume noises....

**Response.** Impacts related to traffic and the associated vehicle emissions that result from the BART extension are addressed in the DEIR/SDEIS. In particular, Section 1.4, Traffic Impact Assessment and Mitigation, in Chapter 3.1, on pages 3.1-87 to 3.1-162 of the DEIR/Technical Appendix, provides a detailed analysis of traffic impacts of the BART extension. See also Section 3.10, Air Quality, of the DEIR/SDEIS.

S5. BAKER, BILL ( 2/15/95)

- S5.1. Whatever plan is approved by BART coming through San Bruno must have a subway starting at Euclid Avenue going south through San Bruno, which must be a bored tunnel or any engineered subway that does not disturb the surface of San Bruno's streets or crossings during or after construction...without cost to our city.

**Response.** The commentor's preference for a bored tunnel through San Bruno is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The bored tunnel option was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

S6. BARTALINI, JACK (PUBLIC HEARINGS 2/15/95, 2/18/95)

- S6.1. We cannot understand why this terrible waste of money that you are considering on spending of the taxpayers' hard-earned money to run a system parallel to an existing system that we already have here in the way of CalTrain.

**Response.** The commentor's general opposition to the BART extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

- S6.2. The taxpayers of San Bruno, [and] the taxpayers of all of the rest of San Mateo County are the ones that are going to have to foot the bill....

**Response.** SamTrans funds of \$99 million are the only directly generated San Mateo County funds shown in the financing plan in Table 6-4 of the DEIR/SDEIS. At \$99 million, County residents were expected to contribute 7.8 percent of the cost of Alternative VI.

- S6.3. The only one that makes any sense is the no-build alternative.

**Response.** The commentor's preference for the No Build Alternative is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the alternative selection process; however, the Alternative VI Aerial Design Option was selected as the LPA by both boards. Please refer to Response 2.7 for a discussion of the LPA selection process. Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies justifying the need for a rail project south of Colma are described in Response 79.18.

- S6.4. We want you to know that the expense of running BART down here parallel to CalTrain is a ridiculous solution, and we think that the money would be better spent over in the East Bay where they're looking for you people.

**Response.** Please refer to Response S1.1 for a discussion of the selection of alternatives considered during the EIR/EIS process.

- S6.5. These kinds of programs always have terrific overruns. When you are talking about a billion dollars now, you'll be talking about two to three billion before you're through.

**Response.** Every effort is being made to reduce the likelihood of cost overruns on the project. Use of a unit-cost data base in cost estimating, utilization of the design-build program, and

reduction of the project costs from those associated with tunnel access to the airport are all aimed at minimizing any cost overruns that do occur.

- S6.6. We are going to have all kinds of traffic problems in San Bruno...with all of these parking lots that we have here....There's no need for these large parking lots here in San Bruno.

**Response.** The number of parking spaces provided at the BART station in San Bruno was determined by the federally approved MTC travel demand model. If demand for parking spaces is not matched by the supply, the result is spillover parking in the vicinity of the station that causes disruptions to residential or commercial activities in the area. Section 1.4, Traffic Impact Assessment and Mitigation in Chapter 3.1, Transportation, on pages 3.1-87 to 3.1-162 of the DEIR/Technical Appendix provides a detailed analysis of traffic impacts of the BART extension, including in the City of San Bruno.

S7. BECKER, TODD (2/15/95)

- S7.1. My main concern is that none of the BART options, except perhaps TSM, meet the transportation needs of Peninsula south of the airport.

**Response.** The commentor's preference for the TSM Alternative is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

The Aerial Design Option proposes a major BART/CalTrain intermodal station at Millbrae Avenue. This station would allow passengers from the south to transfer to BART trains with destinations at the SFIA, San Francisco, or the East Bay.

- S7.2. I strenuously object to our communities having been so totally shut out of the decision-making process. BART to the airport helps none of us who live in Burlingame and other cities south of the airport. In fact, no one from BART, the City of San Francisco, California or Washington bothered to ask us about our transportation needs, and we never bought into BART coming south from Colma....I strenuously object to our communities having been so totally shut out of the decision-making process.;

**Response.** BART has provided an active and involved public participation process through the following vehicles: open houses, public hearings, a project hotline, SFO Train To Plane newsletters, media articles, a local community service center, and periodic public presentations to city councils, as well as through private and civic organizations. In addition, BART staff has been accessible and available to respond to issues ranging from real estate to construction activities.

- S7.3. Why does BART need to go to the airport in the first place? Certainly not to serve the majority of airport workers who live south of the airport, and certainly not to provide the quickest connection to San Francisco. Isn't our money better spent upgrading CalTrain to benefit everyone between San Francisco and Gilroy?

**Response.** The commentor's general opposition to the BART extension to the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. As noted in Response 2.7, the Alternative VI Aerial Design Option was selected as the LPA by both boards. Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.1. As noted in Response 2.7, the BART extension does not preclude improvements to CalTrain. Finally, as discussed in Response 155.3, there is strong regional public support for the BART extension.

S8. BECKETT, JACK (3/4/95)

S8.1. There is no doubt, in my view, that only Alternative VI, Millbrae Avenue via the Airport International Terminal, meets the definition of best solution for the local communities in the nine-country region.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process.

S9. BELKNAP, ERLYS (3/4/95)

S9.1. We already have CalTrain, so why don't they electrify the train instead? It would be a lot less expensive and please leave BART at Colma.

**Response.** The commentor's preference for the TSM Alternative is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

S10. BERNARD, KATHLEEN (2/15/95)

S10.1. BART is a white elephant. It is not going to connect to anything. CalTrain connects to San Jose. It will go to LA. It will connect to Sacramento. It will take us across this nation with the type of tracks.

**Response.** The commentor's preference for the TSM Alternative is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

S10.2. I believe my building is one of the oldest in San Bruno and I think it has some historical significance...and Artichoke Joe's is another one.

**Response.** The only historic structures evaluated for significance are those within the Area of Potential Effect (APE) for the extension. While Ms. Bernard's building may be one of the oldest buildings in San Bruno, it is outside the APE; and because it would not be impacted by the extension, it has not been evaluated as part of this project. Based on the Historic Architecture Survey Report prepared for the FEIR/FEIS, Artichoke Joe's does not meet the criteria for inclusion in the National Register of Historic Places.

S10.3. Consider the safety of the children at Lomita Park and Belle Air Schools.

**Response.** Please refer to Responses 22.1, 22.10 and 22.11 for a discussion of traffic safety issues for the school children in the San Bruno Park School District, which includes Lomita Park and Belle Air Schools.

S11. BISSON-BARNES, ALICE (2/18/95)

S11.1. In three years, Alternative VI, if chosen, will decrease northbound traffic on Highway 101 north of the airport during the morning commute by only 300 vehicles. All that for \$1.3 billion?

**Response.** The statement of congestion reduction, as made by the speaker, is not entirely accurate. Actually, Alternative VI is estimated to reduce morning peak traffic by a net of 300 vehicles each hour (as opposed to over the entire peak period) in the section of Highway 101 north of SFIA in the hypothetical year of 1998.

Regional traffic adjusts to reductions in congestion along certain routes by shifting from other routes. A reduction of over 300 cars per hour on Highway 101 would result in reduced congestion and the shifting of travelers from other routes, most likely Highway 280 in this case, to Highway 101. The environmental documents report only the net reduction of 300 vehicles, and not the benefit to other routes. Moreover, the same table (Table 3.1-93, Alternative VI Estimated Freeway Impacts on Highway 101 of the DEIR/Technical Appendix) also reports that evening traffic for the same section of Highway 101 would be reduced by 700 cars per hour.

The reduction of 300 vehicles per hour is in the hypothetical year of 1998. The project will not be in operation in 1998; the data are included because of CEQA requirements of comparative information. In actual years of operation, the reduction of vehicles is projected to be greater than 300.

In addition, as the number of air passengers increases at the SFIA by 72 percent over 16 years, the reduction of traffic on this section of the highway will become increasingly important. Questioning a capital commitment made strictly to achieve a traffic reduction on a particular section of highway also overlooks other benefits. Other results of the BART-San Francisco Airport Extension will be increased access to jobs, housing, business, recreation and cultural locations in the four counties served by BART to San Mateo County residents, increased regional air quality, and superior access to San Francisco International Airport for passengers, visitors, and employees.

S11.2. 1,125 permanent new jobs will be generated by BART. 1,125 employees currently working in 82 different San Bruno businesses might lose their jobs thanks to BART. Sounds like a net gain of zero?

**Response.** The source of 1,125 new or displaced jobs is not clear. None of the proposed alternatives would displace this many jobs. The highest number of employees that could potentially be displaced would be up to 605 employees and would occur under Alternative V.

S11.3. On Huntington, from San Bruno Avenue to Forest, Alternative V wipes out all the homes, wipes out all the businesses, and wipes out the Church of God.

**Response.** All the buildings on Huntington Avenue between San Bruno Avenue and Forest Lane would be displaced by Alternative V.

S11.4. Third and Angus in San Bruno...is a major crossing for children going to Belle Air Elementary School, yet it was never studied in the draft.

**Response.** The intersection of Third/Angus was not one of the 97 intersections analyzed in the DEIR/SDEIS, although both these streets were included in the subarea traffic model and other intersections involving both Third and Angus were analyzed. Few vehicles going to or coming from a BART station would pass through this intersection. This intersection would not be impacted by construction activity as currently planned. If a haul route were to be assigned by the City of San Bruno that included this intersection, then traffic safety at this intersection would be addressed. Please refer to Responses 22.1, 22.10 and 22.11 for a discussion of traffic safety issues for the school children in the San Bruno Park School District, which includes Belle Air Elementary School.

- S11.5. If Alternative VI is built, the travel time from San Bruno City Hall...to San Francisco City Hall will decrease by just two minutes.
- Response.** The commentor is correct. The travel time from the Civic Center in San Francisco to the San Bruno City Hall would decrease by 2 minutes under Alternative VI, compared to the No Build Alternative. Please refer to Response 66.178 for further discussion on the estimation of travel time, including to the San Bruno City Hall.
- S11.6. Approximately 11 feet, five inches off the floor...[is] the clearance that is currently needed by SamTrans buses. The top of my sign is approximately six feet, seven inches off the floor, which is the clearance in the Tanforan Garage.
- Response.** The existing Tanforan Garage will be reconstructed to provide sufficient clearance for the proposed bus bays below the first level of structured parking. In addition, the garage will be designed and built to conform to all current seismic codes and expanded to accommodate the added parking spaces for BART.
- S11.7. [The]...table...that has to do with the number of residences being displaced...[contains] ten mistakes.
- Response.** The tables presenting displaced residents have been reviewed and the correct numbers for the Aerial Design Option LPA are shown in Volume I of this FEIR/FEIS. Corrections to tables from the DEIR/Technical Appendix are noted in Chapter 4 of this volume.
- S11.8. Under Alternative VI, the handicapped will have to take two elevators and travel more than 250 feet from the bus to a BART train in San Bruno. Accessible?
- Response.** The design of the Tanforan Station has been revised so that physically challenged individuals could ride one elevator from the street to the train platform. The bus drop-off area is as close to the station entrance as possible, given the constraints of the site.
- S11.9. In the project corridor, out of eight intersections that might be significantly degraded, four...are in San Bruno, three under the favored Alternative VI. Bet you're glad you don't drive in San Bruno, eh?
- Response.** Two intersections in San Bruno are significantly impacted under Alternative VI. These two intersections are El Camino Real/Sneath and Huntington/Tanforan Driveway North. The traffic impacts at the intersection of El Camino Real/Sneath will be mitigated to an insignificant level. The revised station plan for the Tanforan Station, under Alternative VI, will alter Huntington Avenue and eliminate significant traffic impacts.
- S11.10. In the project corridor, out of eight parks currently in jeopardy, six of them are in San Bruno, three under the favored Alternative VI. Bet you're glad you don't play in San Bruno, eh?
- Response.** Chapter 5, Section 4(f) Evaluation, of the DEIR/SDEIS and the FRDEIR/S#2DEIS outline potential construction and permanent impacts to parks along the project corridor. The DEIR/Technical Appendix, Table 5-1 (revised as noted in Response 19.16) shows that eight parks may experience direct or indirect construction-phase or permanent impacts, and that five of the parks are in San Bruno. As noted in Response 42.3, the construction scenario has been modified to withdraw Bayshore Circle Park from consideration as a possible laydown area, so that this park would not be used. Other parklands cannot be avoided given restrictions on the project alignment.
- S11.11. In San Bruno they want a bored tunnel.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process. A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

S12. BRACKER, JESSIE (PUBLIC HEARINGS 2/18/95, 3/4/95)

- S12.1. Page S-12 [of the executive summary of the DEIR]...needs correction or explanation. A BART South San Francisco station is not listed, and neither is a BART San Bruno station...with regard to Alternative VI....If there is a possibility of having only two stations, it would be unjustifiable cost-wise, and all impact and mitigation statements should be considered inaccurate for...Alternative VI.

**Response.** Under Alternative VI, there would be a South San Francisco Station at Hickey Boulevard and a San Bruno Station at Tanforan Park Shopping Center. The stations are shown under Alternative VI on Table S-3, page S-10 and on Figure S-2, page S-11 of the Executive Summary.

[Under Alternative VI, there would be a South San Francisco Station at Hickey Boulevard and a San Bruno Station at Tanforan Park Shopping Center.](#)

- S12.2. Under Page S-16, [in] Millbrae...[a] storage yard, tailtracks, car wash and maintenance facilities [do] not belong in open space zoned wetland and flood land zoned, especially where three endangered species have their habitat, plus having it become a visually blighted area that belongs in an industrial zoned area....It should be determined that it's not desirable and be considered as having unavoidable significant impacts....Those plans should be eliminated along with the BART station [under] Alternative IV and V; the LPA; Alternative III, I-380 [design option] which all have the same unavoidable significant impacts.

**Response.** Please refer to Response 74.35 for a discussion of the tail track, train car wash and other facilities.

Impacts to wetlands and endangered species habitat from locating such facilities in Millbrae were determined to be significant, but could be mitigated under terms determined in consultation with the United States Fish and Wildlife Service (USFWS). Please see the Biological Assessment and Biological Opinion in Volume V, Technical Appendices of this FEIR/FEIS for the final determination of impacts and mitigations.

Visual impacts are discussed under Alternatives IV, V, and VI where the Millbrae Station and ancillary facilities are proposed in Millbrae.

- S12.3. Because to build either of these alternatives, the BART tracks would still have to come through the same area, and the extensive fill would still have to be done, thereby creating an unsafe, unstable, saturated area underneath the BART track, which would be very dangerous during the wet, stormy weather or earthquakes and would cause flooding of homes in the Millbrae lowlands.

**Response.** Please refer to Response 74.59 for a complete discussion of this topic.

- S12.4. Alternatives IV and V in the DEIR/DEIS would change neighborhood characteristics of Marina Vista and North Millbrae and create a physical barrier for about 150 homes or more that would be left after fragmentation of homes with overflow parking from BART's garage....

**Response.** Please see pages 3.2-94 and 3.2-97 of the DEIR/Technical Appendix for a discussion of the impacts on Marino Vista and North Millbrae. Alternatives IV and V would impact these neighborhoods.

- S12.5. There would be a very high addition of carbon monoxide concentration, which is a deadly silent killer and destroyer of health and welfare in such a small circle of impacted local residential area abutting the new off-and-on freeway ramps proposed into and out of Center Street and Bay and into and out of the BART garage also abutting residences.

**Response.** Vehicular emissions of carbon monoxide (CO) at roadway intersections and BART parking structures would not produce significant air quality impacts in the vicinity of Center and Bay Streets under any BART design alternative, in any analysis year.

Traffic analysis of intersections in the vicinity of Bay and Center Streets included existing roadway intersections (i.e., Bay and Center Streets, San Anselmo Avenue and Center Street) and future intersections involving proposed streets, Bayshore Freeway ramps, and BART station entrances. These intersections are identified in the DEIR/Technical Appendix, Figure 3.1-3 and Table 3.1-70.

The methodology employed in the selection of roadway intersections for microscale CO analysis was designed to select those intersections where CO concentrations are expected to be highest. The selection methodology considered traffic volumes and intersection level of service (LOS) designation under each BART design alternative in each analysis year; this methodology is described in detail in Section 5.5.1 of the Air Quality Technical Report. The intersection of El Camino Real and Center Street was selected for CO analysis based on these criteria. Predicted CO concentrations at other intersections in the area would be lower than those predicted at El Camino Real and Center Street.

Predicted CO concentrations at roadway intersections and BART parking structures are presented in the DEIR/Technical Appendix, Section 3.10. The predicted CO concentrations presented for a given intersection or parking structure represent the worst-case (highest) concentrations in the vicinity of that intersection or parking structure. Predicted CO concentrations do not exceed the federal or California 1-hour or 8-hour ambient air quality standards under any BART design alternative in any year that the project would be in service (1998 and beyond).

Federal and California air quality standards, including the CO standards discussed above, are "health-based" standards. This means that the standards are established at levels that the regulatory agencies believe will not cause significant adverse health effects in sensitive populations (federal standards are established by the United States Environmental Protection Agency [EPA]; California standards are established by the California Environmental Protection Agency [Cal-EPA]). Sensitive populations are defined as those groups that are particularly susceptible to adverse health effects resulting from air pollution, including elderly people, children, and people afflicted with cardio-respiratory diseases. If ambient air pollutant levels are equal to or less than the standards, no one (sensitive or otherwise) should suffer adverse health effects.

Please also refer to Responses 16.80 and 66.145 for additional discussion of local CO impacts.

- S12.6. The loss of Marina Vista Park and an historical registered nursery school, loss of scenic visual quality of mature trees, open space lands and San Bruno mountain, trees and nature of bushes along the Monterey Street....

**Response.** The DEIR/SDEIS acknowledges the loss of Marino Vista Park and the Millbrae Nursery School under Alternatives IV and V as significant and unavoidable. Visual impacts addressed by the commentor are identified in Section 3.3 of the DEIR/SDEIS, including loss of

open space, distant views of San Bruno Mountain, and mature trees along Monterey Street. Significance criteria were applied to each alternative and mitigation measures recommended for all significant impacts. Mitigation measures proposed include minimizing scale and mass of the Airport Light Rail System, landscaping to reduce impact of new facilities and to partially restore the area's natural appearance, and design features to diminish structure height and scale. Significant impacts for which no mitigation was feasible were acknowledged as unavoidable. Distinctions are also made between short-term construction versus long-term operational impacts.

Parenthetically, it should be noted that the nursery school is not a listed historic structure. Please refer to Response 16.47 for details on this statement.

S12.7. Millbrae would lose property tax from displaced homes and sales tax revenues from loss of business and downtown because Marina Vista and North Millbrae residents would no longer be able to get to shopping in Millbrae safely.

**Response.** If displaced Millbrae residents were relocated into other communities, the City would lose tax revenues, but would also lose an obligation to provide public services. Access for Marina Vista and North Millbrae residents would not be disrupted; their access route to Millbrae commercial areas would be improved and made safer by being grade separated from the CalTrain right-of-way.

#### S13. BRUN, GOTTFRIED (2/18/95)

S13.1. Mr. Brun's oral comments are the same as his written comments. Please refer to Responses 75.1 through 75.7.

#### S14. BULSAN, CONSOR (2/18/95)

S14.1. We [of Aviador Millbrae Apartments] appeal the extension of the BART station to Millbrae Avenue if that would mean demolishing our homes.

**Response.** The commentor's opposition to the construction of a station at Millbrae Avenue is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). Under the LPA, there would be displacement of numerous residences in the vicinity of the proposed Millbrae Avenue Station.

S14.2. We cannot afford housing in other places here in the Peninsula, with a market rent as high as \$850 to \$900. Even in other places here in the City of Millbrae, rent is not affordable for us. Only Garden Lane and Aviador Apartments offer the most affordable rent in the area.

**Response.** Please refer to Response 164.2 regarding replacement housing payments to cover higher housing costs.

#### S15. BURKE, PATRICIA (PUBLIC HEARINGS 2/15/95, 2/18/95, 3/4/95)

S15.1. The [air quality] hot spots, as they are described,...must only meet certain [requirements] if [construction] is to last more than five years. That means that those of us who may be living something like two feet from the construction will have no protection....

**Response.** As described in Section 3.13 Construction/Air Quality of the DEIR/Technical Appendix, total construction emissions of particulate matter ( $PM_{10}$ ), ozone precursors (reactive hydrocarbons and nitrogen oxides), and sulfur dioxide are considered significant because they will

exceed the significance thresholds for total emissions, as adapted from Bay Area Air Quality Management District (BAAQMD) guidelines. Emissions that exceed these thresholds are considered significant because they may tend to worsen regional air quality even if they do not cause any localized exceedance of an air quality standard. PM<sub>10</sub> emissions are also considered significant because they could cause temporary localized exceedances of federal or state PM<sub>10</sub>, ambient air quality standards.

The fact that construction emissions are generally not subject to regulation by the BAAMQD does not mean that residents near construction areas "will have no protection." As described in the DEIR/Technical Appendix and elsewhere in these responses, mitigation measures will be employed to minimize emissions to the greatest extent feasible.

Please refer to Response 19.134 for a discussion of the measures that will be implemented to minimize the amount of particulate matter generated during construction. Please refer to Response 79.4 for a discussion of the measures that will be implemented to minimize the amount of carbon monoxide, ozone precursors, nitrogen dioxide, and sulfur oxides generated during construction. Please also refer to Responses 41.26 and 66.156 for further discussion of construction impacts.

S15.2. [Financing and the flood control district]...concern us.

**Response.** The San Mateo County Flood Control District (FCD) is responsible for the Colma Creek reach between Mission Road and Oak Street, which encompasses the Hickey Station area. The FCD will provide BART with a letter stating its responsibility for Colma Creek in this area, after BART funding is secured and a financing plan is completed.

S15.3. If this construction begins, we who live in the area of construction, particularly Treasure Island mobile home park, will be highly impacted by particulate matter from the dust and by carbon monoxide from two huge BART garages only about four miles apart.

**Response.** The comment addresses two distinct issues which include 1) PM<sub>10</sub> emissions from BART construction activities and 2) vehicular carbon monoxide (CO) emissions from the Colma and Hickey Station parking garages during BART operations.

Please refer to Response 79.4 for a discussion of construction-related PM<sub>10</sub> impacts. Also, please note that construction of the Colma Station is complete and therefore would not contribute to the construction-related PM<sub>10</sub> impacts of this project.

Please refer to Response 79.5 for a discussion of CO impacts at the Treasure Island Trailer Court associated with the Colma and Hickey Stations.

S15.4. We would like our tunnel.

**Response.** Your preference for the tunnel construction option through the City of San Bruno is noted. Please refer to Responses 17.67, 17.68, 66.115, 66.121, and 66.127 for a discussion of the tunnel construction option through downtown San Bruno.

S15.5. At least at one point, the cost of BART's increased cost was related to the fact that it would be more accessible for disabled people. In my opinion, it should be.

**Response.** BART design criteria meet or exceed all requirements of the Americans with Disabilities Act, and all stations, BART vehicles, parking, and other adjacent areas will be fully accessible by the handicapped.

S15.6. Wherever this money is coming from, it is still tax money. And as an American citizen, I want my tax dollar to serve best and not to further any kind of pork barrel situations to create jobs.

**Response.** Please refer to Response 155.3 for a discussion of public support for the project.

**S16. BUSCHMAN, SCOTT (PUBLIC HEARINGS 2/15/95, 3/4/95)**

- S16.1. To give us 60 days to review and comment on something that's going to affect us for the rest of our lives, I think...is a real disservice.

**Response.** BART and SamTrans are committed to listening to the public's comments. The 60-day review period is already an extension beyond the typical review period. In addition, BART has staffed a public information booth and a phone hotline to answer questions and concerns.

- S16.2. Alternatives IV and V are [disastrous] to the city and citizens of San Bruno.

**Response.** The commentor's opposition to Alternatives IV and V is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the selection process. In November 1995, both boards selected the Alternative VI Aerial Design Option as the LPA over Alternatives IV and V, in part due to the impacts of these alternatives (see Response 2.7 for a discussion of the LPA selection process).

- S16.3. Why is there no listing for each of the businesses and homes taken under each of these alternatives? This information should be in the draft.

**Response.** Please refer to Response 47.12 regarding the listing of displaced properties.

- S16.4. Alternative VI is a plan of choice endorsed by the cities it affects and even by the City of San Francisco and the airport. Alternative VI, with a tunneling option, is the only way to go through San Bruno, to not wipe out the business and residential areas. It is generally consistent with San Bruno planning policies. It has the lowest impact of noise and it takes no wetlands and has no permanent impacts.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process. A bored tunnel design was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

- S16.5. You do not address...the closure of lanes under any of the alternatives on San Bruno Avenue. If you close any of the lanes, even one lane, you have traffic that goes through the Belle Air and the avenues, and it's not addressed in the draft and it should be.

**Response.** Closure of lanes on San Bruno Avenue for construction are addressed in the DEIR/Technical Appendix. Under Alternative IV, Mitigation Measures 7.1, Deck Half the Street, and 7.2, Keep Adjacent Sidewalks Open, on page 3.13-39 address construction impacts to San Bruno Avenue, as does Mitigation Measures 5.1, Partial Street Closure, and 5.2, Construction of a Detour, under Alternative V on page 3.13-43. The measures under Alternative V also apply to Design Options V-A and V-B while the measures under Alternative IV also apply to Alternative VI.

Only one of the three grade crossings in Downtown San Bruno would be constructed at a time. This construction strategy will minimize traffic impacts to the downtown merchants, as well as minimizing travel time impacts for San Bruno residents. During the construction under San Bruno

and San Mateo Avenues, some traffic would divert to the Angus Avenue railroad grade crossing and travel through the Belle Air neighborhood.

- S16.6. From the Millbrae intermodal station you would connect to the airport with the airport light rail system...that the airport would build anyway.

**Response.** The commentor's support for a CalTrain/ALRS intermodal station with the ALRS providing a connection between the Millbrae Station and the airport is acknowledged. The concept of connecting CalTrain to the airport with an Airport Light Rail System is an alternative in the *CalTrain-San Francisco International Airport Light Rail System Connection Feasibility Study* and currently under consideration by the Peninsula Joint Powers Board and the San Mateo County Transportation Authority.

- S16.7. If BART does extend south, though it must come through in the manner described in Alternative VI and bored tunnel through San Bruno.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process. A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

- S16.8. Follow the alignment all the way to Tanforan as in Alternative VI, but then we go to bored tunnel from Euclid to south of Sylvan, coming up east under the existing CalTrain tracks. And from there, parallel the CalTrain tracks in the tunnel all the way to the Millbrae intermodal station at Millbrae. By eliminating the fourth station on the line which would be the airport station and by not having to tunnel bore twice under Highway 101, you would save about \$300 million.

**Response.** The commentor suggests a straight-through tunnel alignment in the CalTrain corridor from south of Sylvan Avenue in San Bruno to the BART/CalTrain Millbrae Avenue intermodal Station without a BART connection to the airport. Major elements of the commentor's proposal have been evaluated in the Alternative VI Aerial Design Option. The Aerial Design Option provides straight-through mainline service along the CalTrain right-of-way to a Millbrae BART/CalTrain Station located at Millbrae Avenue. This mainline alignment is in subway except between Georgia Avenue in San Bruno and Madrone Avenue in Millbrae, where the mainline rises to grade, and the wye-stub to the airport rises to an aerial alignment perpendicular to the CalTrain/SPTCo mainline, terminating at the planned Airport International Terminal.

**S17. CAIMOTTO, JOSEPH (3/4/95)**

- S17.1. I am not anti-BART to the airport, but very much against BART coming to Millbrae or Burlingame.

**Response.** The commentor's opposition to the BART extension through Millbrae and Burlingame is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

- S17.2. For one thing, the MTC analysis showed that BART/SFO extension would get most of its riders from the CalTrain, not from the airport. This is true only if CalTrain is not extended to downtown San Francisco. In other words, BART/SFO supporters, like our independent state senator and some of our San Mateo County supervisors, must kill the CalTrain extension to make the BART/SFO extension have any credibility.

**Response.** Please refer to Response 14.23 for a discussion of the basis of transfers volumes between CalTrain and BART. Please refer to Response 11.6 for a discussion of transfers between BART and CalTrain, with the BART extension, and with the CalTrain downtown extension.

- S17.3. The Peninsula has a rail system that is vastly under-utilized and the potential to alleviate our traffic congestion problems. CalTrain can be upgraded to a BART-like system for a billion dollars less than it would cost to extend BART down to the peninsula.

**Response.** Please refer to Response 10.1 for a discussion of the commitment of SamTrans to CalTrain, buses, and the BART-San Francisco Airport Extension. Please see environmental documents on the proposed CalTrain extension for a current cost estimate.

Also, please see Response 107.40 for a discussion of the costs of the proposed CalTrain extension.

**S18. CAMERON, CHARLIE (3/4/95)**

- S18.1. Are the trains, three and four cars, going to be able to handle the capacity, days and/or heavy days and/or seasons? The fare structure, will it be relative to stations in distance?

**Response.** The proposed operating plan provides service to handle the MTC projected weekday peak and off-peak demand in the year 2010. BART schedules its train headways and adjusts train lengths (from three up to ten cars per train) on all four routes with a goal of a 1.15 load factor (passengers per seat) during peaks and a load factor of 1.0 in the off peak, subject to the constraint of car availability. During peak periods, BART typically runs ten car trains on the transbay routes which would serve the proposed BART extension. During the midday, early morning, and night, BART adjusts train lengths to between three to five cars to accommodate demand. Please refer to Response 177.2 for a discussion of BART capacity.

Per the Comprehensive Agreement Pertaining to BART System Extension, March 1, 1990, BART would establish the basic fare structure consistent with the fare structure throughout the BART system and SamTrans can establish fare surcharge, except for the southernmost station on the proposed extension.

BART's fare components and ticket prices are essentially distance-based, but also include other components such as surcharges and speed premium, as shown in Table S18 below.

The BART board's policy is to provide a 90 percent discount to senior citizens (65 or over), disabled persons when qualifying under the RTA discount program, and children (5 through 12). Children 4 years old or under ride free.

**S19. CARTER, JEFF (PUBLIC HEARINGS 2/18/95, 3/4/95)**

- S19.1. I recommend that we do not go forward with Alternative VI.

**Response.** The commentator's opposition to Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process.

- S19.2. The current EIR does not address the issue of CalTrain and BART integrating in various locations.

**Response.** Please see Response 13.4 for a discussion of the CalBART proposal, which would replace the BART extension and CalTrain Downtown San Francisco/Electrification/Upgrade projects.

All of the BART build alternatives have a BART/CalTrain Station intermodal station. One of the underlying assumptions (see page 2-107 of the DEIR/Technical Appendix) of the screening criteria used to define all of the BART build alternatives is that it must provide a BART/CalTrain intermodal transfer. The ability to transfer between BART and CalTrain improves the regional transit system and provides additional mobility for transit dependents and transit access to the region for people of San Mateo.

- S19.3. My concern with this is making CalTrain and BART...complement each other as transit systems do in other metropolitan areas. It appears clear that BART wants to take over CalTrain....

**Response.** BART has no intention of taking over CalTrain. All BART alternatives would result in the development of a coordinated transit system that links local and regional transit systems by providing intermodal connections with SamTrans, CalTrain, and the Airport Light Rail System. A transfer between BART and CalTrain has been one of the underlying factors in the definition of all of the BART build alternatives carried forward for evaluation in the DEIR/Technical Appendix.

BART does not fragment or weaken, the existing transit system. BART and CalTrain serve different markets. They are complementary, not competing, systems. MTC predicts that all of the BART alternatives would result in increases in CalTrain ridership. The CalTrain ridership increases would be approximately 38,000 to 47,000 total daily boardings in the year 2010 under all BART build alternatives. CalTrain ridership increases, under all build alternatives in the DEIR/Technical Appendix, would be due to projected growth in the region, physical improvements, service improvements, and the provision of a CalTrain/BART transfer.

- S19.4. CalTrain has twice the capacity over BART. In the heyday of CalTrain,...they operated express trains of up to twelve cars on three minute headways and henceforth...[brought] up speed.

**Response.** The operating plan for the BART extension has 164 trains per weekday northbound into San Francisco. The proposed operating plan also has two transbay routes serving south of the Daly City Station, providing 4-1/2 minute peak and 7-1/2 midday weekday average headways into San Francisco, (see DEIR/SDEIS Table 2-1 BART Service Summary for the Proposed Project, page 2-5.) In contrast, CalTrain currently runs 60 trains per weekday, 30 trains northbound into San Francisco plus 30 trains southbound to San Jose or Gilroy. Currently CalTrain has seven trains arriving at 4th and Townsend in San Francisco between 7:00 A.M. and 8:00 A.M. for an average headway of 8.5 minutes. Two of these trains are scheduled as close as four minutes apart.

CalTrain capacity could be increased with closer headways, acquisition of cars and electrification/signaling and associated increases in operating costs. These capacity increases are under study. The CalTrain San Francisco Downtown Extension/System Upgrades study, 1995, has up to 74 weekday northbound trains as an operating plan. The CalBART proposal has 93 trains per weekday northbound into San Francisco. Please refer to Response 13.4 for additional discussion of CalBART.

Currently BART operates three transbay routes at an average headway of 3 3/4 minutes during the peak hour. With the BART's capacity expansion program, peak period peak direction transbay headways would be reduced from 3 3/4 minutes to 2 minutes. CalTrain does not have "twice the capacity over BART".

- S19.5. For most San Mateo County residents, access to downtown San Francisco would be slower via a BART transfer connection at the airport as opposed to an improved and upgraded CalTrain.

**Response.** Travel time on BART to downtown San Francisco, including the transfer time between CalTrain and BART, is less than the travel time on CalTrain to the current San Francisco terminus of 4th and Townsend with transfer to Muni to the downtown area. Please refer to Response 66.256 for a discussion of travel times within the BART extension compared to travel times with the extension of CalTrain to downtown San Francisco.

S19.6. I think the present DEIR/DEIS seems to be slanted towards Alternative VI, which is the most expensive -- the most costly. We need to look for a lower cost alternative and the cost savings could be used for East Bay BART extensions, as was brought up.

**Response.** The commentor's opposition to Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process. As noted in the FRDEIR/S#2DEIS, the costs for the new LPA are lower than for the proposed project, Alternative IV, Design Option V-A, and Alternative VI (as originally proposed).

S19.7. High speed rail is not studied at all in this situation and that would indicate that you need some kind of downtown rail station in San Francisco...So that opposes the people that say there will never be a downtown extension for CalTrain. We have got to look at the whole picture here.

**Response.** High speed rail is not studied as an alternative in the DEIR/Technical Appendix. The Alternatives Selection Process is documented in Section 2.5, pages 2-99 through 2-12 of the DEIR/Technical Appendix. Selection of the Colma to San Francisco Airport corridor as the corridor for study, not as a high speed rail mode of transportation in the AA/DEIS/DEIR, stems from a planning process established by the Federal Transit Administration (FTA), as described below.

Under the FTA's Major Capital Investment Planning Process, a Phase I - Systems Planning Study establishes a corridor where an alternatives analysis would be performed. A Phase II - Alternatives Analysis study evaluates a specific corridor.

The 1985 Peninsula Mass Transit Study systems planning study evaluated various transportation alternatives in a larger corridor between San Francisco and San Jose. In March 1989, the MTC entered into a planning process with the Urban Mass Transportation Administration (formerly UMTA, now the FTA) to "pre-screen" mass transit alternatives on the Peninsula that could be advanced to an alternatives analysis.

The *BART San Francisco Airport Extension/CalTrain Upgrade Pre-Alternatives Analysis/DEIS* evaluated six alternatives: 1) No Build; 2) Transportation Systems Management (TSM); 3) a BART extension to an external Airport station; 4) an upgrade of CalTrain; 5) light rail transit from San Francisco to San Jose; and 6) an extension of BART to an internal airport station. The MTC recommended that Alternatives 4, 5, and 6 be dropped from further consideration for one or more of the following reasons: cost effectiveness, financial infeasibility, and/or lack of a project sponsor. Therefore, the pre-screening of alternatives concluded that BART was the preferred mode and the Colma-to-SFIA Southern Pacific San Bruno Branch railroad right-of-way was the preferred corridor for further study.

The DEIR/Technical Appendix is a continuation of the AA/DEIS/DEIR study. Thus, the criteria developed for the DEIR/Technical Appendix screening of alternatives focused on BART.

In May 1990, FTA (then the UMTA) approved the initiation of a Phase II Alternatives Analysis study for No Build, TSM and BART alternatives within the Colma to SFIA corridor. The DEIR/Technical Appendix is a continuation of the AA/DEIS/DEIR study, and alternatives for

consideration are to be within the Daly City to SFIA corridor. Please refer also to Response 155.5 for additional discussion of high speed rail.

S20. DE ANDA, KATHARINE (3/4/95)

S20.1. Ms. De Anda's oral comment is the same as her written comment; please refer to Response 103.1.

S21. DELANDER, PAUL (2/15/95)

S21.1. Will the historical, old streetcar cemetery station across from Holy Cross Cemetery survive the BART construction?

**Response.** The 1902 Holy Cross Cemetery Station is a contributing element of the Holy Cross Cemetery District which is eligible for the National Register of Historic Places. The project would not create any adverse impacts to this building.

S21.2. Why not combine the LPA alternative and the No. VI and the extra not listed....Have the BART slide up to...the back door of the...Emporium...at Tanforan Park Shopping Center, then transfer it south out to the 380 median strip, then follow the 380 median strip across 101 to United Airlines repairs facilities. From the United Airlines repairs facilities, continue up to a terminal station and then...continue to a median strip on the 101 heading south and stay on the 101 with overpass stations for Millbrae and Burlingame....

**Response.** Alternative 6 - SFO Internal Station Via I-380, similar to your proposed alternative to underneath the center of the short-term parking garage, was evaluated in the AA/DEIS/DEIR. At the conclusion of the Alternatives Analysis study, Alternative 5A - BART to Airport External Via I-380 was chosen as the 1992 LPA, not Alternative 6. Alternative 6 terminated in a subway tailtrack south of the Airport Internal Station and did not continue south to the median of Highway 101 with overpass stations for Millbrae and Burlingame, as proposed by the commentor. Overpass stations in the median of Highway 101 for Millbrae and Burlingame would require reconstructing the Millbrae and Burlingame intersections with Highway 101. There is insufficient vacant land at the Millbrae and Burlingame intersections with Highway 101.

S22. DELL'ANGELA, LOUIS (PUBLIC HEARINGS 2/15/95, 2/18/95)

S22.1. We think a lot more needs to be done in the environmental report to deal with the noise, vibration, and drainage issues.

**Response.** Additional detailed studies will be performed on noise and vibration impacts and mitigations during the preliminary design phase of the project. These studies will develop the specific design and locations to control unacceptable noise and vibrations during construction and operations.

Additional design development will be required to fully address the question raised about the impacts of drainage issues and the details of the proposed mitigation measures. Local agencies will be consulted on the effects of the proposed project and portions of the project that affect their constituency.

S22.2. Extend the response period....

**Response.** The response period for review of the DEIR/SDEIS was extended to cover a 60-day period, beginning January 13, 1995.

S22.3. I think other problems that exist in the environmental report deal with the El Camino High School area and the Sunshine Gardens neighborhood. I think traffic impacts in that area have not been addressed.

**Response.** Traffic impacts in the El Camino High School and Sunshine Gardens neighborhood were addressed in the DEIR/SDEIS. Five existing intersections were analyzed, including Mission/Evergreen, Mission/Grand, Oak/Grand, Chestnut/Grand, and Mission/Oak, as well as the proposed intersection of Hickey Extension/Mission and all of the proposed intersections related to the station exits and entrances for both the Hickey and Chestnut BART Stations.

S22.4. There is talk about putting permit parking in the Sunshine Gardens neighborhood to address a parking shortfall....It's not fair to the people who live there to assume a parking problem that's created at the Hickey station.

**Response.** A permit parking program would be instituted in the vicinity of the Hickey or Chestnut Stations only if spillover parking were a problem to residents of the Sunshine Gardens neighborhood, based on their complaints to South San Francisco police and BART police. These stations would be designed to have an adequate supply of parking and mitigation measures addressing spillover parking would be implemented only in the event that this problem were to occur.

S22.5. Many of us are concerned in South City with this local share that the city has to come up with, anywhere from \$23 to \$40 million in order to get a subway.

**Response.** The financing plan has been revised as preliminary engineering has progressed and as funding sources have become clarified. Please refer to the Financial Analysis in Volume I of this FEIR/FEIS for a discussion of the role of the various funding entities in covering the cost of the extension. Please see Response 19.21 for a discussion of locally borne capital costs.

S22.6. It seems like funding is absent or not enough for any of the construction projects other than the base case. And it seems to me that until the funding is guaranteed, then I think talking about these scenarios is meaningless and we are really wasting our time here.

**Response.** Please see Response 14.93 for a discussion of the parallel processes of defining a project and developing a financing plan. Completing a financial plan, including solidifying all sources, is a process parallel to the environmental process, and BART, SamTrans, MTC, and FTA have worked closely with other agencies to bring all the required resources together for the LPA. A revised financial plan is presented in the Financial Analysis, Volume I of this FEIR/FEIS.

S22.7. I am not convinced we need this station at Hickey and Mission Road and El Camino....[Being] near a residential area, [it] impacts severely the school and residential area, and I think we'd be best served by taking that station out.

**Response.** Your opposition to the proposed Hickey Station is noted. The Alternative VI LPA, 1992 LPA, Alternatives IV and V and their design options have a Hickey Station in South San Francisco between Mission Road and El Camino Real.

In October 1991, in response to the City of South San Francisco's request, the Policy Committee for the AA/DEIS/DEIR approved the study of an alternative South San Francisco Station at Hickey Boulevard. The City Council of South San Francisco supports the Hickey Station. In support of the Hickey Station, the City of South San Francisco has prepared the El Camino Corridor Redevelopment Plan and General Plan Amendment to foster more intensive development around the Hickey Station.

As described in Section 3.2, Land Use, of the DEIR/Technical Appendix, the Hickey Station is in the Sunshine Gardens neighborhood of South San Francisco near El Camino High School. The proposed Hickey Station has the beneficial effect of supporting local policies and efforts to encourage station-related development on nearby vacant or under utilized parcels, as noted on page 3.2-36 of the DEIR/Technical Appendix. The Hickey Station would displace a total of four businesses and two single-family residences, and would disrupt local social patterns of shopping, circulation, and neighborhood activity, as noted on page 3.2-56 of the DEIR/Technical Appendix.

As noted in the DEIR/Technical Appendix, there would be a significant deterioration in traffic level of service at the proposed Hickey Boulevard extension exit in during the P.M. peak hour.

The DEIR/Technical Appendix does not make the finding that the Hickey Station would severely impact the school and residential area.

S22.8. I am concerned about...the financing proposals of Table 6-4...the unfunded local's share varying from, anywhere from \$22 million to \$272 million in Alternative VI. If my city can't come up with this share...\$30 or \$40 million, what happens? Is the base case scenario going to take over, or is there some funding coming from somewhere that I don't know about?

**Response.** Please refer to Responses 19.21 and S22.5 regarding local funding participation.

S22.9. If the Alternative VI, or the preferred alternative, is selected and the funds can only bring the section to the Hickey Station, will South San Francisco have to live with an end-of-the-station scenario until...[BART] can build a second and third phase?

**Response.** BART does not have any plans for phasing the BART extension with an end-of-line South San Francisco Station. The environmental impacts of an end-of-line station in South San Francisco have not been addressed in the DEIR/SDEIS. Such a station would require additional environmental analysis before it could even be considered by the BART and SamTrans boards of Directors.

S22.10. One alternative route...might run up along Hillside Boulevard away from the houses, down the industrial area, which is a high employment area in South San Francisco, past the United maintenance terminal, and then later into the station.

**Response.** The proposed alternative is a combination of two alternatives previously rejected from further study. The BART Hillside Alignment was considered and rejected from further study during the scoping and screening process for the DEIR/SDEIS. During the scoping and screening process for the DEIR/SDEIS, as described on page 2-111 of the DEIR/Technical Appendix, BART and SamTrans staff evaluated proposed alternative #12 - BART Hillside Boulevard Alignment to Gateway and Shearwater Redevelopment Projects and an intermodal station west of Highway 101. This alternative was rejected by the Steering Committee on August 20, 1993 because of significant potential for adverse impacts to cemeteries and because it is unlikely that BART would be able to acquire cemetery rights-of-way.

Alternative 6 - SFO Internal Station via I-380, studied in the AA/DEIS/DEIR, included a subway station at the United Airlines Maintenance facility with a subway alignment to a station beneath the center of the existing short-term parking garage. At the conclusion of the Alternatives Analysis study, Alternative 5A - BART to Airport External via I-380 was chosen as the 1992 LPA, not Alternative 6.

S23. DERENZI, GARY (2/15/95)

- S23.1. Somebody said we should use addresses. Well, that would be nice. It would relieve a little stress in my household.

**Response.** Please refer to Response 47.12.

- S23.2. I'm in favor of Alternative VI...That's the one with the boring machine?

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

S24. DEVILLE, DENISE (3/4/95)

- S24.1. The SAMCEDA position on the backbone of a fixed rail transit system within San Mateo County has three important facets....Both CalTrain and BART have demonstrated their ability to fill distinct and essential transportation roles within San Mateo County and are viewed as complimentary and meeting future transit requirements....The opportunity to link CalTrain, BART and SamTrans at an intermodal station in the vicinity of the San Francisco Airport must be the goal of any BART extension south of Colma....Fixed rail transit service, via the Southern Pacific right-of-way, should be maintained in and through San Mateo County, providing inter-county linkage with compatible systems and Santa Clara County to the south and Alameda County to the east.

**Response.** Both CalTrain and BART fill complementary and essential roles for meeting future transportation requirements.

A BART/CalTrain/ALRS intermodal station is provided under the 1992 LPA, and Alternatives III, IV, V, and the V-A and V-B Design Options. A BART/CalTrain Intermodal Station is included in Alternative VI and the Alternative VI Aerial Design Option, which was selected as the LPA in November 1995. A BART/CalTrain intermodal connection was one of the threshold criteria required for an alternative to be considered further in the Screening Report.

Providing a BART/CalTrain intermodal connection has been a cornerstone and integral part of all build alternatives evaluated in the alternatives Analysis conducted by MTC and the DEIR/SDEIS by BART and SamTrans. It is necessary to offer an intermodal station as a connection between BART and CalTrain to maintain and enhance existing and proposed commuter service. The ability to transfer between BART and CalTrain improves the regional transit system and provides additional mobility for transit dependents and transit access to the region for the people of San Mateo County. In addition, the Aerial Design Option LPA includes a direct BART, connection from Millbrae to the proposed new Airport International Terminal.

Fixed rail transit service via the Southern Pacific right-of-way should be maintained.

- S24.2. Funding for both the capital outlay and the ongoing maintenance and operations is of great concern to the business community. So as not to create unwieldy burdens on San Mateo County transit agencies and taxpayers, funding scenarios and ridership projections should be conservative and outline worst-case scenarios.

**Response.** The financing plan that underwrites the adopted project will include adequate resources to cover the entire cost of the project, and will include mitigation costs, financing costs, contingencies, reserves, and insurance elements.

S25. DIFILIPPO, JOE (2/15/95)

- S25.1. If you pick a downtown [San Bruno] station or even if you pick the 380 station, you're going to be disrupting a lot of residences in that area.

**Response.** The DEIR/SDEIS acknowledges the impacts that Alternatives IV and V would have in Section 3.2 this FEIR/FEIS.

- S25.2. If you turn around and put in a retained cut-and-cover...you have got a safety issue of all the children [of Belle Air School]....I'm very concerned about one of [the children] falling during construction.

**Response.** Please refer to Responses 22.1, 22.10 and 22.11 for a discussion of traffic safety issues for the school children in the San Bruno Park School District, which includes children at Belle Air Schools. Please refer also to Response 22.15 for a discussion of securing the construction site to prevent school children from being endangered.

- S25.3. [We support] the tunnel option on Alternative VI.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process. A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

S26. DRAGO, JACK (3/4/95)

- S26.1. A retained cut configuration is an unacceptable alignment option to South San Francisco. It would increase noise, obstruct pedestrian and vehicular access, and create safety hazards. A subway configuration would mitigate these impacts and is therefore the only acceptable option for South San Francisco.

**Response.** Your opposition to an open retained cut alignment and support for a subway configuration in South San Francisco is noted. The Aerial Design Option LPA and all other BART build alternatives except for Alternative III are in a subway configuration through South San Francisco. Alternative III is in a below grade open retained cut through South San Francisco.

The noise and vibration, transportation, pedestrian/bicycle, and public health and safety impacts of the Alternative III retained cut alignment are found in Sections 3.1, 3.9, and 3.11, respectively, of the DEIR/Technical Appendix. After mitigation, the noise and vibration impacts of Alternative III in South San Francisco are reduced to an insignificant level. Alternative III would not affect legal crossing of the SPTCo, though informal crossing would be eliminated. The DEIR/Technical Appendix found that the "loss of informal crossings is not considered a significant impact because it is illegal to cross the right-of-way at these locations."

- S26.2. The city believes there are flaws in the traffic report significant enough to require that this study be redone.

**Response.** Despite the concerns raised by the commentor, BART has completed a technically sound traffic analysis. All of the issues presented in oral comments by the City of South San Francisco have been answered in responses to the comment letter received from the City (Letter 19).

- S26.3. The report also assumes that Hickey Boulevard will be extended from Mission Road to Hillside Boulevard. This improvement is critical to protect the adjacent Sunshine Gardens Neighborhood and to reduce unacceptable impacts to the Westborough and Chestnut Avenues. The report should underscore the importance of this roadway improvement.

**Response.** Please refer to Response 19.7 for a discussion of the Hickey Extension between Mission Road and Hillside Avenue.

- S26.4. The planned South Spruce Avenue overpass, as it is currently designed to cross BART, will create traffic hazards.

**Response.** Please refer to Response 19.8 for a discussion of the South Spruce Avenue overpass as it relates to traffic impacts.

- S26.5. Regarding a residential parking permit program in Sunshine Gardens Neighborhood, the city is concerned that such a program would have a significant impact on our police services. BART is not mitigating this impact but rather shifting the problem to the city, and this has not been discussed.

**Response.** Please see Responses 14.57, 14.59, and 19.21 for a discussion of locally borne costs.

- S26.6. The Draft EIR recognizes that airport passengers may use these BART extension parking lots to access the airport. It further states that the related additional traffic and parking demands have not been quantified in the parking estimates....We ask that the BART system must provide parking at the stations appropriate to this increased demand associated with this airport parking.

**Response.** Please refer to Response 10.10 for a discussion of air passengers parking at BART stations along the BART extension.

**S27. DREILING, MARTIN (2/15/95)**

- S27.1. I...support...the TSM alternative.

**Response.** The commentor's preference for Alternative II is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process.

- S27.2. Page 1-9 of the technical appendix spells out...[e]ight goals...listed which encompass 23 objectives. Of the objectives, the BART build proposal has failed to meet 13 of those and therefore fails to fully satisfy any of the eight goals.

**Response.** Please refer to Response 14.7 for an evaluation of alternatives based on the identified goals and objectives of the project.

- S27.3. The TSM alternative...meets all of the objectives except the two that specifically describe a BART-owned project as a goal.

**Response.** The commentor's preference for Alternative II is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA. Please refer to Response 2.7 for a discussion of the LPA selection process.

S27.4. The BART proposals create more traffic congestion on most highways and streets. They transfer auto use from one town to another and create billion dollar parking lots so people can leave their cars just outside San Francisco.

**Response.** Please refer to Response 107.7 for a discussion of traffic congestion related to the BART extension. The number of parking spaces provided at the BART station in San Bruno was determined by the federally-approved MTC travel demand model. If demand for parking spaces is not matched by the supply, the result is spillover parking in the vicinity of the station that causes disruptions to residential or commercial activities in the area.

S27.5. The proposals do not encourage a coordinated transit system but actually fragment and weaken the existing rail transit system on the Peninsula.

**Response.** Please refer to Response 107.8 for a discussion of a coordinated transit system.

S27.6. [The proposals] do not minimize adverse impacts on the natural resources of the corridor.

**Response.** Please refer to Responses 3.1 and 107.9 regarding selection of the Least Environmentally Damaging Practical Alternative.

S27.7. The BART proposals will generate massive and undisclosed impacts on the built environment of local communities.... The BART alternatives will also generate massive disruptions of existing land use. They will create significant disturbance to existing neighborhood character, even in the 5th Addition, even with the changes that are proposed.

**Response.** The DEIR/SDEIS identifies the significant environmental impacts of the project alternatives.

S27.8. The proposals ignore low-cost design options such as use of existing transit facilities by existing transit operators.

**Response.** The use of existing SamTrans and CalTrain transit facilities is incorporated in all alternatives and is explicitly evaluated in the No Build Alternative. Alternative II (TSM) includes a set of background transit improvements in the transportation network in order to forecast ridership and future traffic volumes. These background transit improvements included as part of the TSM Alternative are:

- construction of the Colma BART Station;
- relocation of the existing San Bruno CalTrain Station under I-380;
- construction of the ALRS where it crosses Highway 101 to serve the CalTrain/Airport Light Rail Station or the BART/CalTrain/Airport Light Rail Intermodal Station; and
- extension of Muni Metro from the current terminal at the foot of Market Street to 16th Street.

As part of the TSM and all BART build alternatives, CalTrain service would be expanded to 86 one-way weekday train trips between San Francisco and San Jose. In addition, the commentor is referred to Response 14.7 (Goal 4 - Financial Feasibility) for discussion of investigation of low-cost BART options.

S27.9. The proposals do not minimize travel time. They do not provide for overall efficiency of operations.

**Response.** Please refer to Response 107.18 for a discussion of minimizing travel time.

**S28. EDWARDS, JEFF (3/4/95)**

- S28.1. For each connection or leg of a transit trip, you lose 50 percent of the potential riders. Thus, it is absolutely essential that the BART station is in the airport, not somewhere short of it, requiring another transfer.

**Response.** Alternative VI was expressly developed to minimize the number of transfers required to access the airline terminals. Under this alternative, over 75 percent of the patrons would be able to walk to their airline check-in areas from the internal airport station. Please refer to Response 2.7 for a discussion of the selection of alternatives considered during the EIR/EIS process.

- S28.2. When designing the airport station, please take into account the luggage factor when designing the fare gates, escalators, stairs, etc. A baggage check-in for the major airlines located on the platform would be ideal.

**Response.** Under Alternative VI it is proposed that luggage check-in facilities be provided at both ends of the mezzanine level of the BART station; a system similar to curb-side check-in now in use could be implemented. BART is also considering providing special fare gates which permit the passage of luggage through the gates at the airport and selected other stations, such as the Millbrae Avenue Station where CalTrain passengers transfer to BART under Alternative VI. Please refer to Responses 30.4 and 294.4 for further discussion of baggage check-in.

- S28.3. Funds available don't allow the full project. You should build the airport and Tanforan station first and fill in other stations afterward, as funds become available.

**Response.** Please see Response 19.22 for a discussion of incremental funding of the project.

- S28.4. When building the Tanforan station, please get it close enough to a door to the mall so as to be usable. I have given up on shopping at the Bayfair because it's too far around the building to get to a door.

**Response.** Preliminary engineering and final design plans for the Tanforan Station will be developed to maximize direct access to Tanforan Park Shopping Center to the extent practicable.

- S28.5. Of the current choices, it appears that Alternative VI best addresses my concerns.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

**S28.A. FALSARELLA, JOHN (3/4/95)**

- S28.A.1. I was not able [to] get a written statement that would say that Millbrae would not be out a nickel. I feel very strongly that we'll pay the price if a station is built in Millbrae.

**Response.** Please refer to Responses 19.21 and S22.5 for an explanation of local funding sources. At the time of publication of the DEIR/SDEIS, the participatory role of the local cities in funding the project had not yet been defined. The financing plan was conceptual only because a project had not been selected. Please refer to the Financial Analysis, Volume I of this FEIR/FEIS for a discussion of the role of each funding entity and the relative contributions of each.

S28.A.2. Talking about traffic congestion, if you realize that people here in the audience, we just sued the airport, the City of Millbrae sued the airport, for the idea of all the impact on traffic...and now we're going to allow the BART station, which is going to magnify the problem far more.

**Response.** Please refer to Responses 16.8 and 16.9 for a general discussion of traffic impact to local streets in the City of Millbrae, and Responses 16.18 through 16.24 for discussions of impacts to specific streets.

S28.A.3. Being an end of the line station, we expect nothing but a lot of crime.

**Response.** Please refer to Responses 14.57, 16.2, and 16.7 regarding crime at existing stations.

**S29. FERNEKES, JOE (3/4/95)**

S29.1. The discussion of the Treasure Island Mobile Home Court is very weak. The construction impacts and the long-term noise and/or vibration impacts need to be addressed fully.

**Response.** The long-term groundborne noise and vibration effects to the Treasure Island Trailer Court are specifically noted on page 3.9-20 of the DEIR/Technical Appendix. Construction-period impacts are identified on page 3.13-165 of the same document. The impact discussion on these pages fully represent the proposed project's effects on trailer court residents.

S29.2. The impacts to the boys and girls club and the Bay and the Mayfair Village areas of our city is not adequately discussed in the document.

**Response.** Please refer to Responses 19.13, 34.3, and 34.6.

S29.3. The city disagrees with the EIR statement that there will be no significant impact to the Francisco Terrace Play Lot.

**Response.** Please refer to Response 19.16 for a discussion of South Spruce Avenue and the Francisco Terrace Play Lot.

S29.4. Linear Park. The use of right-of-way as park land is important, since very few opportunities to acquire new park land exist in our city. Unfortunately, the report does not discuss the Linear Park adequately.

**Response.** The DEIR/Technical Appendix does not discuss a linear park in the San Bruno Branch right-of-way box in South San Francisco, although it does indicate that future bicycle facilities are planned by the corridor cities along the San Bruno Branch and CalTrain right-of-way (page 3.1-187). The cities of South San Francisco and San Bruno, and San Mateo Supervisor Tom Huening have all requested consideration of a linear park and/or bicycle path over the subway box. Please refer to Response 14.1 for a discussion of the linear park and/or bicycle path over the BART subway alignment.

S29.5. The city is very concerned about the extent and the use of temporary construction easements. The actual use of these areas is not described, but in many cases the easement completely involves businesses, residents, and park land.

**Response.** Please refer to Response 19.114 regarding construction easements.

S29.6. The description of the sources and the amount of the BART extension project funding need to be updated and clarified.

**Response.** Please see the Financial Analysis in Volume I of this FEIR/FEIS.

S29.7. We continue to be concerned about the inadequacy of commitment by BART to properly police their facilities. The suggestion that South San Francisco reorganize its police department as a mitigation to substantially increased crime opportunities should not be considered as a mitigation.

**Response.** Please see Responses 14.57, 16.2, and 16.7 for a discussion of crime, and Response 14.59 for a discussion of costs of emergency services.

S29.8. The City of South San Francisco supports the BART extension.

**Response.** The commentor's support for the BART extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

#### S30. FOGARTY, JANET (3/4/95)

S30.1. All of the impacts which affect the North Millbrae neighborhoods are significant...if the station is located as described in the base case, LPA, Alternative 4, or Alternative 5....Choose a different alternative which will not be located at, on or near Center Street. Those are Alternatives V-A and VI.

**Response.** The commentor's preference for Design Option V-A and Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The new LPA does not incorporate an intermodal station at Center Street in Millbrae.

#### S31. FOGARTY, PETER (3/4/95)

S31.1. We as an organization [Operational Engineers Local #3) and myself support BART into the San Francisco Airport.

**Response.** The commentor's support for the BART extension into the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The LPA incorporates a BART extension into the airport and an ALRS directly to the terminals.

#### S32. FRANK, L. (2/15/95)

S32.1. The idea of putting [the intermodal between BART and CalTrain] at Tanforan is very good. I think BART should go right into the airport.

**Response.** Under all of the build alternatives proposed, the Tanforan Station would be BART-only; the intermodal (i.e., BART/CalTrain) stations would be located elsewhere. Under the Alternative VI Aerial Design Option (which the BART and SamTrans selected as the LPA in November 1995), the intermodal station would be at Millbrae Avenue (see Response 2.7 for a discussion of the LPA selection process). The Aerial Design Option LPA incorporates direct airport access.

S33. FRATE, DON (3/4/95)

Mr. Frate represents the San Bruno Chamber of Commerce. His oral comments are also presented in a letter from the SBCC. Please refer to Responses 46.1 through 46.9.

S34. GEASLAND, RICHARD (2/18/95)

- S34.1. This extension to SFO and Millbrae, Proposal No. VI, I think is the best start. A station inside the terminal would be a big part of this.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). Under this alternative, BART would have an airport station at the SFIA's planned new International Terminal.

- S34.2. I would like to see more above-grade construction of the tracks and stations, except at the airport where constrictions require it to be underground. Tunneling is expensive. Above-grade tracks are visually impressive and have been proved earthquake safe.

**Response.** Your preference for more above-grade construction is acknowledged. Segments of above-grade construction are considered in the 1992 LPA and the Alternative III analyses. The 1992 LPA includes a segment south of South Spruce Avenue to the Tanforan Station at-grade. Alternative III includes an aerial alignment over three cross streets in downtown San Bruno. Both alternatives have an at-grade Airport Intermodal Station and tailtrack west of Highway 101.

The alignment to the proposed Airport GTC and International Terminal Stations under Design Option V-A and the Alternative VI LPA is a tunneled subway. These alignments to the GTC and International Terminal area must be in tunneled subway to avoid conflicts with aircraft operating areas.

The Cities of Colma, South San Francisco and San Bruno have all indicated a strong preference for below-grade subway through their cities.

S35. GIL, JOAN (2/18/95)

- S35.1. I hope it stops at Colma.

**Response.** The commentor's opposition to all of the build alternatives is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. As noted in Response 2.7, the Alternative VI Aerial Design Option was selected as the LPA by both boards. Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18.

S36. GIUSTO, ALBINO (3/4/95)

- S36.1. If...[BART] comes to Millbrae, we don't want parking in Millbrae. We want people who take CalTrain, to park in their own city...and where they already have parking for these cars, and then take the train. And then if they want to transfer onto BART, have an intermodal station where they could get off one train and get onto the other and go into San Francisco on BART.

**Response.** MTC's mode choice model determined patronage forecasts for the BART extension and the type of access to the BART stations, including the number of CalTrain riders who transfer to BART and the number of vehicles that would be parked at BART stations along the BART extension.

Please refer to Responses 14.25, 14.30, and 14.38 for a discussion of BART's strategy regarding parking impacts.

S36.2. If we have parking garages -- Wherever we have them, it will only mean that more people will drive from where they live to these parking stations whether they go to the airport....I don't think we should provide 3,000 area parking for automobiles which will concentrate automobiles...in one area. We want to move people and not automobiles.

**Response.** The goal of public transit is the same as stated in Comment letter S36.2: "We want to move people...". The automobile is one of the major modes used by BART patrons to access stations. Please refer to Response S36.1 for a discussion of the supply of parking spaces required for BART stations along the BART extension.

#### S37. GONSOLVES, MAXINE (3/4/95)

S37.1. Alternative VI would be my choice.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the selection process).

#### S38. GOVERNALE, TONY (3/4/95)

S38.1. I strongly support Alternative VI.

**Response.** Please refer to Response S37.1 for a discussion of Alternative VI.

#### S39. GREGORY, SYLVIA (3/4/95)

S39.1. Alternative VI will require northbound CalTrain riders to debark at Millbrae, wait for BART to the new international terminal, get off BART and then wait for the airport people mover to get them to the domestic terminals or to work. It's ridiculous.

**Response.** The commentor's opposition to Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the selection process). Please refer to Table 3.1-63 of Section 3.1, Transportation, in the DEIR/Technical Appendix for estimated travel times on the proposed BART extension alignment.

S39.2. The best way to get BART to the airport and provide better transit for the people south of the airport is to connect CalTrain to the airport people mover and extend CalTrain into downtown San Francisco to connect to BART at Market Street.

**Response.** Please see Response 79.18 for an overview of the studies conducted evaluating various proposals to extend BART to the Airport. Based on these studies, the BART and SamTrans boards have concluded that CalTrain alone does not meet the project requirements. As a result,

the boards have selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the selection process). As noted in Response 2.7, extension of BART to the SFIA does not preclude further improvements to CalTrain.

- S39.3. A full range of transportation choices into SFO should be included. They should range from a small, non-auto, non-bus facility on the west side of the airport property to link CalTrain to the airport light rail project all the way to this over-engineered BART boondoggle.

**Response.** A reasonable range of alternatives is considered in the DEIR/SDEIS. The DEIR/SDEIS builds on 20+ years of planning studies conducted to identify transportation requirements on the Peninsula. An overview of the alternatives selection process is summarized in Section 2.5 of the DEIR/Technical Appendix. The Screening of Alternatives Report, 1993, explains the screening process used to determine the alternatives to be studied in the Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (DEIR/SDEIS) for the BART extension project.

The TSM Alternative in this study includes a CalTrain/Airport Light Rail Station to link the SFIA and CalTrain west of the SFIA terminals and Highway 101. This station also provides facilities of SamTrans buses and parking spaces for 160 vehicles and on and off ramps to/from Highway 101.

To maximize patronage and to provide an effective transit system, the TSM Alternative CalTrain/Airport Light Rail Station needed to provide access for both auto and bus. If a CalTrain/Airport Light Rail Station did not provide access for autos and buses, it would not satisfy the effectiveness project goal to "provide an effective addition to the regional transit system" that is convenient for passengers. Not providing auto and bus access would not be convenient for many passengers.

- S39.4. Will SamTrans be able to take on the cost as well as support a well-designed and integrated transit system of CalTrain and feeder buses on the Peninsula or will SamTrans be broke? An in-depth study would show that this BART extension would be a heavy drain on San Mateo County taxpayers, and these taxpayers are now to be conned into paying 25 percent of the construction as well as 100 percent of the operation and maintenance....

**Response.** Please refer to Response 186.30 for a discussion of the BART-SamTrans Agreement.

- S39.5. The question, are we assured that 75 percent of the cost of even the base case alternative for extension for BART will come from the feds in Washington after the change of mood and attitude there?

**Response.** The financing plan for the BART-San Francisco Airport Extension includes a 64 percent contribution by the federal government. Please refer to Response 14.93 for a discussion of financial information provided in an environmental document and the Financial Analysis in Volume I of this FEIR/FEIS for the revised funding plan.

- S39.6. For the \$30 million that we gave BART for this study, I would expect a report that would be nonpolitical, objective, and would actually cover all the transit alternatives, not this pro-BART report that we have been given.

**Response.** The DEIR/SDEIS examines each of the project alternatives, including non-BART options, at an equal level of detail. For example, both the No Build Alternative and the TSM Alternative are non-BART options. Please refer also to Responses 242.3 and 79.11.

S40. GWATHNEY, MARGARET (2/15/95)

S40.1. I...prefer BART directly into the airport...

**Response.** The commentor's support for the BART extension into the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The LPA incorporates a BART extension into the airport and an ALRS directly to the terminals.

S40.2. The airport station has shockingly obvious problems. Its placement deep underground has effectively hidden it from everybody arriving on an airplane....Its placement as far as possible from domestic flights, effectively discourages all domestic flight passengers, in and out-going, from finding it and from going to the huge trouble of getting to it or from it.

**Response.** The internal airport station has been located adjacent to the proposed International Terminal to provide reasonable walking distances to over 75 percent of the airline ticketing check-in areas. The vertical distance from the BART platform to the ticketing hall is about 90 feet; escalators and elevators are provided for this purpose. Many subway stations around the country and overseas have stations at this depth (if not deeper) for which mechanical means are provided for all patrons. Signing and information systems will be provided as part of the overall airport system to direct patrons to and from the BART station.

S40.3. Speaking of expense, the [Airport International Terminal Station] design seems, with this deep tunnel, multiple levels, many escalators, sets of stairs, sets of elevators, to be designed to be as expensive as possible for as few passengers as possible.

**Response.** The design of the station proposed for the International Terminal under Alternative VI was, of necessity, located underground with both escalator and large capacity escalator access to the International Terminal. The high cost of the station and the tunnel alignment were the impetus for BART to search for another airport access alignment and station design. The Alternative VI Aerial Design Option station design offers a simple design, excellent access to the International Terminal, the ALRS, and other airport locations at a substantially lower cost.

S40.4. I notice no consultant responsible for access to the handicapped to the overall design in the DEIR.

**Response.** BART and its consultants have professional staff who are fully knowledgeable of the handicap requirements and are responsible for designing all facilities to comply with current accessibility codes of the State of California as well as the federal American Disability Act.

S40.5. I notice on the distribution list, no local agency advisor, steering committee member or organization serving those with any disability. There are no identified adverse impacts on those with disabilities to be found in the DEIR, and thus no mitigation.

**Response.** Please refer to Response S2.2 regarding accessibility provisions for those with disabilities.

S40.6. Transfer, especially at the airport station as presently envisioned, is a major adverse impact that has not been mitigated and this section under public health and safety is completely missing.

**Response.** Transfers between two transit systems do not cause significant impacts because they occur within the boundaries of specific BART stations. If "transfers" refers to auto occupants

accessing a BART station, then traffic impacts are addressed in the DEIR/SDEIS, though no auto access to the International Terminal Station under Alternative VI would be permitted.

If by "transfer," the commentor is referring to passenger movements between BART and terminals at SFIA, then the final design of the BART station would facilitate passenger convenience. Accommodations will be made for air passenger luggage drop-off immediately outside of a BART station at the planned new International Terminal. Elevators will be available for any passengers who choose to use them, including persons with children and those with disabilities. Under the Alternative VI Aerial Design Option, the International Terminal Station would be elevated to the same level as the ticketing counters at the proposed new International Terminal under Option X or at the same level as the ALRS under Option B.

S41. HAAS, JAMES (3/4/95)

S41.1. We think that Alternative VI, as presently designed, is rather poor if you attach the criteria of intermodal change. There is no north station where CalTrain and BART meet. It's only in the south in Burlingame or on Millbrae Avenue. That would inconvenience a lot of people.

**Response.** The commentor's preference for an intermodal station located in the northern portion of the project corridor is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the selection process). Under the new LPA, the intermodal station would be located on Millbrae Avenue.

S41.2. On Page 3.1-14 and the next succeeding pages...[are] a number of ridership statistics. We feel that those are rather poorly put together. Although the report acknowledges that there is work on bringing CalTrain to downtown, it does not look like the figures are based upon that.

**Response.** The terminus of CalTrain as analyzed in the DEIR/SDEIS is Townsend and 4th Streets. The CalTrain Downtown Extension was included in the alternatives analyzed in the AA/DEIS/DEIR. Please refer to Response 11.6 for further discussion of the CalTrain Downtown Extension.

S41.3. The statistics don't break down. The CalTrain riders will be coming south to the airport or from the north. They don't address the issue of employees to the airport, which is a particularly important thing since there are about 30,000 of them. The data that talks about the schedule that BART will use, shows that there will be 20-minute headways in the evenings and in the early morning and no service in the middle of the night. How will that affect employees?

**Response.** CalTrain riders who transfer to BART would be traveling from south of the intermodal transfer station while SFIA workers using BART would come from both north and south of the airport. Daily transit trips by workers to the SFIA are presented in Tables B-1, B-5, B-9, B-13, B-17, B-21, B-25, B-31 and B-37 in Appendix B of the DEIR/Technical Appendix; these tables do not separate transit trips by the different transit systems such as BART and SamTrans. The transit patronage forecasts for the BART extension from MTC's travel demand model included off-peak service characteristics, such as scheduled headways that approximate current levels of service.

S41.4. The report does indicate it will take 41 minutes to get from the airport station to Montgomery Street, whereas CalTrain could deliver people to the same location in about 23 minutes.

**Response.** Please refer to Response 66.256 for a discussion of travel times to downtown San Francisco with the BART extension compared to travel times with the CalTrain Downtown Extension.

S41.5. The breakdown of the Millbrae intermodal station is rather perplexing. It does not really indicate how many people will be transferring out of CalTrain into BART and how many people would drive to the station.

**Response.** Transfers between auto to BART are provided in tables that address BART station entries and exits by access mode, including Tables B-4, B-8, B-12, B-16, B-20, B-24, B-28, B-36 and B-40 in Appendix B of the DEIR/Technical Appendix. These tables include auto access to BART for park-and-ride as well as kiss-and-ride. The intermodal transfers between BART and CalTrain are summarized in Table 3.1-7, Daily Intermodal Transfers Between Rail Services, in the DEIR/Technical Appendix.

S41.6. There is a proposal for [3,000] parking spaces, but that's not really justified.

**Response.** MTC's mode choice model determined patronage forecasts for the BART extension and the type of access to the BART station, including the number of CalTrain riders who transfer to BART and the number of vehicles that would be parked at BART stations along the BART extension. If demand for parking spaces is not matched by the supply, the result is spillover parking in the vicinity of the station; this would result in disruptions to residential or commercial activities in the area.

#### S42. HILLS, ERNEST (3/4/95)

S42.1. There is a shortage of \$300 million for the project. Unless we look at every cost containment, we will not get federal funds.

**Response.** The project has been structured to include several cost-containment measures. These include a number of lower cost design options (at-grade construction as opposed to tunneling, the I-380 Least-Cost Design Option, limited station footprints, etc.). See the Financial Analysis, Volume I of this FEIR/FEIS for a discussion of current estimated capital costs.

S42.2. If Colma insists they have the subway line, they should come up with the \$15 million, the same method that Berkeley came up with, supplementary funds.

**Response.** Please refer to Response 19.21 for a discussion of the role of cities in funding the project.

S42.3. The 40-car line from Holy Cross to Burlingame, should be turned over to SamTrans for strictly transit use.

**Response.** BART understands that this comment refers to the San Francisco Water Department property that parallels SPTCo right-of-way. In the past, a light rail system operated within the Water Department's right-of-way. Portions of the Water Department property would be purchased with the BART extension. SamTrans would have to negotiate with the City of San Francisco for use of this property.

S42.4. The Chestnut station has 62 percent of the population of South San Francisco within a mile radius -- Hickey, only 22 percent. There should be a 3,000 car parking lot for cars.

**Response.** Both the proposed Chestnut and Hickey Stations would function primarily as local catchment stations, attracting patrons primarily from South San Francisco and to a lesser extent from Pacifica and areas west of I-280. The stations would serve the same market. As shown in Table 3.1-95, Parking Analysis-2010 of the DEIR/Technical Appendix, the MTC-modeled parking demand for the Chestnut Station was 1,140 parking spaces and between 1,010 and 1,200 parking

spaces at the Hickey Station. Based on the MTC AA/DEIS/DEIR and DEIR/SDEIS patronage forecasts, 3,000 parking spaces are not needed at either station.

S42.5. The Tanforan station should have the platform moved south so that the south end of the platform is under I-380 and a CalTrain station adjacent. This should be a 3,500 car parking lot.

**Response.** The Tanforan station has not been designed to be an end-of-line Station. The Millbrae Station would provide space for up to 3,000 cars for this purpose. The traffic forecasting models developed by MTC and used for determining patronage and parking requirements for this Extension identified a need for only 1000 parking spaces at the Tanforan Station.

S42.6. At the SFO interior station, there should be no parking. Otherwise, free loaders will park there and take the people mover into the airport.

**Response.** Air passenger parking will not be permitted at BART stations along the BART extension. The internal BART station to SFIA under Alternative VI would not have parking. The other BART station inside SFIA under Alternative IV would have only 100 parking spaces, and air passenger parking would not be permitted.

S42.7. The problem with endangered species was brought up, yet nobody on staff has ever contacted the Sacramento Office of Endangered Species to see what can be done to build, not an excuse on not to build at that location.

**Response.** Since 1993, BART has been consulting on this project with the Endangered Species Branch of the U.S. Fish and Wildlife Service, located in Sacramento. A mitigation plan has been developed to compensate for impacts to endangered species in the project corridor. Please refer to the Biological Assessment in Volume V of this FEIR/FEIS.

S42.8. The interior station, which is not part of the contract between BART and SamTrans, should be designed similar to the O'Hare station -- a dead-end station where the easterly end is under the existing garage, the westerly end, under the international terminal.

**Response.** The airport internal station is a part of the BART Extension Program; SamTrans is a formal participant in all stations on this extension. It is no longer financially feasible to construct a tunnel under the existing roadways and garage running in an easterly direction as a stub end. BART, however, is exploring other alignment alternatives that might provide stub end service to the airport terminal area as part of development of a Mainline Bypass directly to the Millbrae Station.

S42.9. There is a problem with the extension south and it's the problem that if you look at the Tanforan under the garage and out at Millbrae, you're looking at one billion dollars in cost.

**Response.** The estimated cost of the Aerial Design Option LPA is just over one billion dollars (\$1,070 million). The parking garage associated with the Tanforan Station is no longer proposed as a shared facility; it will be exclusively for the use of BART patrons. The Millbrae Avenue Station will be an intermodal facility, serving BART, CalTrain, SamTrans buses, cars, pedestrians, and bicycles. Approximately 3,000 parking spaces will be provided.

The capital costs of the other Alternatives range from \$803 million for Design Option V-B to \$1,269 million for Alternative VI.

S43. HILLS, RICK (3/4/95)

- S43.1. I'm here to speak in favor of Alternative VI is because it's the only alternative that goes directly into San Francisco Airport with a station.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option (which includes direct airport access) as the LPA (see Response 2.7 for a discussion of the selection process).

- S43.2. The time, money, disruption of neighborhoods, debates, fights, elections, everything that is going into creating this huge public construction project in San Mateo County, has one important concern and that is getting BART into San Francisco Airport, because that is the one avenue that will increase ridership to justify all of the time and concern.

**Response.** Improved transit service to San Mateo County is as important as improved service to the SFIA. Transit ridership on BART to the SFIA is approximately 15 percent of BART patronage in San Mateo County while the remaining 85 percent serve other portions of the County. Please also refer to Response 2.7.

S44. HOLOBER, RICHARD (3/4/95)

- S44.1. The various proposals will result in BART facilities being in extremely close proximity to Lomita Park School which is one of our district's schools in San Bruno....We're very concerned about the safety impact that it will have on the students at school and also students who need to cross over those tracks in order to get to school.

**Response.** Please refer to Responses 22.1, 22.10 and 22.11 for a discussion of traffic safety issues for the school children in the San Bruno Park School District, which includes Lomita Park Schools.

- S44.2. We're also concerned about the impact that it will have on the school district's funding, because Alternatives IV, V, and VI will result in displacement of residential housing and that will impact as many as 90 students that are enrolled in the Millbrae Elementary School District. That in turn means a loss of state funding in terms of ADA, average daily attendance funding, and categorical funding of perhaps \$350,000 to \$400,000 a year.

**Response.** Reduced enrollments should also result in decreased financial requirements.

S45. HOOPER, JOHN (2/18/95)

Mr. Hooper testified in behalf of the Coalition of Colma Cemeteries. His oral comments are the same as his written comments. Please refer to Responses 40.1 through 40.14 for a discussion of his written comments.

S46. HORN, ALAN (2/15/95)

- S46.1. Mr. Horn's oral comments are the same as his written comments. Please refer to Responses 144.1 and 145.1.

S47. HUO, SHUE (3/4/95)

S47.1. Most of the people we don't support the BART. We are against the BART com[ing] to Millbrae...

**Response.** The commentor's opposition to the BART extension through Millbrae is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

S48. JEWEL CROSS, NANCY (3/4/95)

S48.1. We support CalTrain having a station at the airport without BART any farther than it is in San Mateo County right now and to have a bicycle garage at the airport for people in the vicinity to access the airport.

**Response.** The commentor's opposition to all of the build alternatives is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. As noted in Response 2.7, the Alternative VI Aerial Design Option was selected as the LPA by both boards. Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18.

S49. JOHNSON, NEAL (2/18/95)

S49.1. I support adopting Alternative VI...

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the selection process).

S49.2. The report does not discuss certain costs associated with non-Alternative VI alignments...Freeway ramps would have to be constructed to access the parking lot on the west side of the freeway. Those are not in the cost estimates...Additional track would have to be laid for the airport light rail. That is not addressed.

**Response.** Where applicable, costs for freeway ramps for Alternative VI are included in the conceptual estimates. Where applicable, Airport Light Rail System costs are included below the line on Table 6-1 in the DEIR/Technical Appendix. Please refer to Response 149.2 for a discussion of these costs.

S49.3. For the future, the other alternatives stop short of where Alternative VI stops. Additional money, if you are going to compare apples to apples, would have to be factored in on how much would have to be spent to extend BART to the same point that Alternative VI gets BART to.

**Response.** Alternative VI has the longest alignment, the greatest number of stations, and the highest cost at \$1,269 million. Both the 1992 LPA and Alternative VI LPA extend to the Millbrae Avenue Station; the 1992 LPA, however, has only three stations, and therefore a reduced cost. The Alternative VI Aerial Design Option LPA extends to Millbrae Avenue, has four stations, and an estimated cost of \$1,070 million.

A per-mile comparison of the costs of the various alternatives would not be meaningful because of differences such as station type, vertical profile (tunnel, cut-and-cover, at-grade, or aerial), complexity of utility relocations, etc.

- S49.4. There are some features of Alternative VI which seem unnecessary from looking at the design document. One fairly expensive element...is a relief track which is in the vicinity of Lion's Field Park.

**Response.** Under Alternative VI, a subway relief track would branch off the mainline route south of the existing San Bruno CalTrain to the SFIA to provide storage for up to 20 cars or two ten-car trains. Storage of up to 20 cars at this point in the alignment provides operational flexibility to store disabled trains and additional capacity to turn trains around before the end-of-line at Millbrae Avenue.

- S49.5. The mitigation of wetlands and other things that you haven't told us in the report -- what exactly is the cost of doing different things?

**Response.** The Financial Analysis, Volume I of the FEIR/FEIS outlines the cost of mitigating environmental impacts. Greater detail on mitigation efforts and costs is provided in the FEIR/FEIS than was available at the time of publication of the DEIR/SDEIS. A Mitigation Monitoring and Reporting Plan which discusses procedural mitigation efforts will be on file at BART offices.

- S49.6. I believe that the airport internal station could be built a level higher than proposed. I believe the concourse could be at street level instead of being a level below the street. I think that would reduce costs.

**Response.** The existing airport entry/exit roads are directly over the BART subway station. It is not possible to have any BART facilities at grade in this location on the airport. The elevations shown for the underground station are at the highest level possible to provide the required functions and not disrupt any surface activities of the airport.

**S50. JORDAN, GERHARD (3/4/95)**

- S50.1. What is BART? BART is calling itself Bay Area Rapid Transit System. It is a misnomer. It is mediocre, ill-conceived, ill-managed, lousy transportation system.

**Response.** The commentor's opposition to the entire BART system is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

- S50.2. BART...can transport only one out of ten airport travelers and at that, without their luggage.

**Response.** BART patrons will be able to take their luggage with them onto BART trains as some patrons do today. The BART station at SFIA would provide special pass-thru fare gates to handle luggage; baggage check-in facilities similar to curbside check facilities for private vehicles would be provided at either end of the station. BART "C" cars have extra floor space near the doors that would accommodate passengers' luggage.

**S51. KEISLING, MICHAEL, (PUBLIC HEARINGS 2/15/95, 2/18/95) LETTER #32, NOT FOUND.**

- S51.1. If the TSM alternative is within 3,000 people of the Alternative VI, and the TSM alternative does not include the idea of an extension of the CalTrain to downtown, if that was analyzed along with

a CalTrain station in the airport, you might actually get more people for less money with that alternative.

**Response.** The TSM Alternative is not within 3,000 BART or transit patrons of Alternative VI. The number of regional transit person trips, or linked trips, presents the differences from the No Build Alternative where the volumes are the closest between the TSM Alternative and Alternative VI. Under the TSM Alternative, transit person trips would increase by 8,100 trips in 1998 and under Alternative VI, these linked trips increase by 20,600 trips in 1998, or a difference of 12,500 trips between these two alternatives.

Please refer to Response 11.6 for a discussion of the CalTrain Downtown Extension and the transit impacts related to the BART extension. Please refer to Response 54.4 for a discussion of the number of linked trips with and without the CalTrain Downtown Extension under the TSM and Base Case Alternatives.

S51.2. We forget about BART from Colma to SFO and we put CalTrain into the airport with the money that is there for BART today in the bank, not the money that you think is coming from Washington at some point. The funding is there to put CalTrain into the airport.

**Response.** The commentor's support of a CalTrain extension under Highway 101 in subway into the airport instead of the BART extension is noted.

Funding in place for the BART extension totals \$498 million from \$301 million in Section 3 New Starts Funds, \$98 million in State TCI funds, and SamTrans funds of \$99 million. See Volume 1, Financial Analysis Chapter of the FEIR/FEIS for more information on financing.

There is \$568.5 million for the Colma and BART extension and Tasman Light Rail Extension in Santa Clara County in Federal Section 3 New Starts funds authorized by the ISTEA Act of 1991. \$301 million of this authorization is allocated to the BART extension by the BART/SamTrans/Santa Clara County/MTC MOU dated December 1993. The ISTEA funding authorized for the BART extension cannot be shifted to a CalBART project, and these funds would be lost to the region if they are not used for their stated purpose.

The remaining \$197 million in State TCI and SamTrans funding "in the bank" is far short of the required funding for the CalBART proposal based on the proponent's estimate of \$1,186 million (1993\$).

S52. KELLY, JAMES W. JR. (PUBLIC HEARINGS 2/15/95, 3/4/95)

Except for the comment below, Mr. Kelly's oral testimony is the same as his written comment. Please refer to Responses 155.1 through 155.13 for a discussion of his comments.

S52.1. The Peninsula rail corridor operates inter-gauge high speed trains of greater speed, capacity, and comfort on its own. It would be compatible as BART now is not, with high speed trains to LA and other points. The cost of doing that would be under what is proposed to us for only six miles.

**Response.** CalTrain's standard gauge is compatible with a future possible high speed rail trains to Los Angeles and other points but numerous capital improvements would be required to accommodate high speed rail on CalTrain facilities, including, at a minimum, rebuilding new rail, new trackbed and ballast, right-of-way takes for longer horizontal high speed rail turns, grade separations with cross streets, etc.

BART is not aware of an engineering cost estimate for converting the present CalTrain service to high speed rail and thus does not understand and cannot comment on the basis by which the commentor makes a comparison.

Please refer to Response 54.17 for a discussion of FTA's Major Capital Investment Planning Process.

Please refer to Response 107.43 for a discussion of Phase 1 BART-San Francisco Airport Extension/CalTrain Upgrade Pre-Alternatives Analysis/DEIS study.

**S53. KING, DWIGHT (3/4/95)**

- S53.1. In support of this [BART-SFIA] extension.

**Response.** The commentor's support for the BART extension into the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

**S54. KNIGHT, MARTI (2/15/95)**

- S54.1. Our City Council unanimously favors the TSM alternative which would improve CalTrain service. Of the BART build alternatives, the existing locally preferred alternative...seems to be the most acceptable, while Alternative VI...is unacceptable.

**Response.** The commentor's preference for Alternative II and opposition to Alternative VI is noted. Please see Response 79.18 for a discussion of the studies conducted evaluating various proposals to extend BART to the Airport. Based on these studies, the BART and SamTrans boards have concluded that CalTrain alone does not meet the project requirements. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

- S54.2. We also question the financial capability of SamTrans to meet the required capital costs and operating subsidy for the most expensive of all of the alternatives proposed.

**Response.** Please see Response 10.1 for a discussion at SamTrans participation in the project.

- S54.3. We don't want to reduce existing service...

**Response.** The commentor is referring to reduction in existing SamTrans bus service. Please refer to Response 14.29 for a discussion of the changes made in SamTrans bus service as part of the modeling assumptions under the BART build alternative compared to the No Build Alternative. Any changes to SamTrans routes must first be proposed and then discussed in public hearings held by SamTrans before such changes are implemented.

- S54.4. [We do not want to] risk SamTrans' financial future on a project which does not serve all of our county's needs.

**Response.** Please refer to Response 10.1 for information on SamTrans' financial future.

S55. KOPP, QUENTIN SENATOR (3/4/95)

S55.1. I join...in expressing support for Alternative VI....

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the selection process).

S56. LINKS, BO (2/15/95)

Mr. Links represents Artichoke Joe's. His oral comments are the same as his written comments. Please refer to Responses 66.1 through 66.258 for a discussion of his comments.

S57. LOFTIS, MARILYN (2/15/95)

S57.1. our support for Alternative VI.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the selection process).

S58. LYONS, LARRY (3/4/95)

S58.1. I'm here speaking as an individual today, but I strongly support Alternative VI with a BART into the airport and a station at Millbrae Avenue.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the selection process). The new LPA includes direct airport access and an intermodal station at Millbrae Avenue.

S58.2. SamTrans should also take a realistic look at their routes. I think that much can be done in coordinating SamTrans with the BART and Feeder routes into it, which would help alleviate a lot of the traffic problems in the area.

**Response.** MTC's mode choice model was used to determine the mode of access to the proposed BART extension stations. In the model, transit service, including SamTrans buses was increased to ensure that supply was not a constraint to potential demand. The increase in transit service included additional feeder service from local routes of SamTrans into the BART extension stations. Please refer to Response 14.29 for a discussion of the changes made in SamTrans bus service as part of the modeling assumptions under the BART build alternative compared to the No Build Alternative. Any changes to SamTrans routes must first be proposed and then discussed in public hearings held by SamTrans before such changes are implemented.

S59. MACHIDA, EILEEN (2/18/95)

S59.1. The one thing about all these alternatives that I have seen is that they all stop....It makes no sense at all to transfer the hassle of commuting down the South Bay from downtown San Francisco to the San Francisco Airport....Go down all the way or don't do it at all and electrify CalTrain and extend it to downtown San Francisco.

**Response.** Please refer to Response 2.7 for a discussion of the selection of alternatives considered during the EIR/EIS process.

**S60. MATALQUIN, LOARDOS (2/15/95)**

S60.1. We support Alternative VI and with the bored tunnel option through San Bruno.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

**S61. MCINTOSH, TERESA (2/15/95)**

S61.1. We support Alternative VI with the bored tunnel option through San Bruno...We oppose all other alternatives, especially the LPA and the I-380 least-cost option...

**Response.** Please refer to Response 2.7 for a discussion of the selection of alternatives considered during the EIR/EIS process. A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

S61.2. The Draft EIR does not adequately address the issue of the restriction that the BART alignment will put on pedestrian access. We suggest that there be at least two legal pedestrian crossings with light signals distributed at locations to accommodate the 5th Addition residents in the north and south sections.

**Response.** The revised Tanforan Station under Alternative VI would provide signalized pedestrian crossings on Huntington Avenue between the Tanforan Park Shopping Center and the Fifth Addition neighborhood. The BART alignment under the 1992 LPA, Alternatives III and V as well as Design Options V-A and V-B would be at grade for a portion of this segment of Huntington Avenue and then the BART alignment would transition to retained cut for the remaining portion. Pedestrian access under these five alternatives to the Tanforan Park Shopping Center would be confined to the Herman Street overcrossing. Under Alternative IV, the BART alignment remains at grade adjacent to this segment of Huntington Avenue and then would transition to an aerial alignment at Herman Street. Pedestrian access from the Fifth Addition to the Tanforan Park Shopping Center would be restricted to Herman Street, which would pass under the BART tracks.

**S62. MCMAHON, JOANNE (3/4/95)**

S62.1. I am a supporter of the [Alternative] VI plan.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

S63. MCNAMARA, DAN (2/15/95)

S63.1. The idea of having BART arriving five stories below level makes absolutely no sense, especially for \$450 million more....No one will be able to get to the airport from San Mateo County or San Jose without going to Millbrae, transferring to BART, arriving in the basement...

**Response.** Please refer to Response 2.7 for a discussion of the selection of alternatives considered during the EIR/EIS process. Subsequent to the selection of Alternative VI as the LPA in April 1995, considerations of costs and coordination with the SFIA, among other things, prompted BART and SamTrans to modify the LPA and adopt an aerial design option to Alternative VI, which goes to the International Terminal at SFIA. The boards adopted this Aerial Design Option LPA in November 1995.

S63.2. Why when this study was on, how come there was no consideration of a high speed rail stop?

**Response.** High speed rail service was not under consideration in this DEIR/SDEIS. The proposed BART extension, however, does not preclude high speed rail. Please refer to Response 13.4 for a discussion of this issue.

S63.3. The operating and maintenance costs will be \$50 million a year....We're going to bankrupt San Mateo County.

**Response.** As shown in Table 6-2 of Chapter 7 of the DEIR/Technical Appendix and DEIR/Summary, Operating and Maintenance Costs (O&M) for the SFO Extension are estimated at approximately \$27.6 million per year (Design Option V-B) to \$35.3 million for Alternative VI in 2010. O&M costs for the Aerial Design Option LPA are estimated at \$34.5 million, as shown in Table 6-2 of the FRDEIR/S#2DEIS in 2010. All are in 1996 dollars. No statement is made in the environmental documents that annual O&M costs are \$50 million per year.

Please see Response 14.95 for a discussion of SamTrans O&M costs.

S63.4. You upgrade CalTrain, you get an airport stop, you extend it into the downtown and you don't have to spend \$1.3 billion on BART and you don't displace all these people and their homes.

**Response.** The commentor's preference for the TSM Alternative is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). As noted in Response 2.7, the BART extension does not preclude CalTrain improvements, including extending CalTrain into San Francisco

S64. MENDELSON, GLENN (2/15/95)

S64.1. We should consider modernizing and electrifying our existing rail transit system and bring it to the airport.

**Response.** The commentor's preference for the TSM Alternative is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). As noted in Response 2.7, the BART extension does not preclude CalTrain improvements.

S64.2. Regarding BART's Alternative VI which places a tail track into Burlingame, I see no benefit to my community and some serious negative ones....

**Response.** The commentor's opposition to the tailtracks that would extend into Burlingame under Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). Please see Response 14.47 for a discussion of impacts related to the tailtracks in Burlingame.

S65. MIDSON, RAMONA (2/15/95)

- S65.1. It has been said that BART should go directly to the airport. I'm not against progress if that is what this is called, but why is it necessary to come through the cities and destroy what has taken years to build?

**Response.** The route of each of the proposed build alternatives would generally follow the existing path of the SPTCo San Bruno Branch and SPTCo/CalTrain mainline from the Colma Station to the vicinity of the SFIA. As discussed in Chapter 2 of the DEIR/Technical Appendix, these build alternatives were determined, through an extensive public process, to be the only feasible build alternatives to accomplish project objectives. In addition, other corridors were previously evaluated and rejected from further consideration.

In 1972, the San Francisco - Airport Access Project (SFAAP) evaluated three corridors from Daly City to SFIA, including the I-280 to I-380 corridor, for a possible extension of BART. During the study, the SFAAP Board of Control selected the Muni corridor adjacent to the SPTCo San Bruno Branch for continued study and rejected the Colma Creek and I-280 to I-380 corridors from further study. The I-280 to I-380 corridor was rejected because of engineering difficulties, site access problems, possible highway relocations, and because of the aesthetic impact of various transit structures on the existing freeway was deemed undesirable. The corridor considered for the BART extension has long focused on the SPTCo San Bruno Branch and SPTCo/CalTrain rights-of-way.

- S65.2. BART, please, use the no-build option which is also approved by the TSM Alternative II, and don't build in Millbrae...

**Response.** The commentor's preference for Alternative II is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies justifying the need for a rail project south of Colma are described in Response 79.18. Under Aerial Design Option LPA, there would be an intermodal station at Millbrae Avenue.

S66. MOONEY, JOHN (2/15/95)

- S66.1. Extend...[BART] right to the airport...

**Response.** The commentor's support for the BART extension into the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The LPA incorporates a BART extension into the airport and an ALRS directly to the terminals.

S67. MORALES, ALBERTO (3/4/95)

S67.1. There is no analysis of potential traffic impacts resulting from the construction of a BART station on Millbrae related to the circulation from the I-280 corridor.

**Response.** Please refer to Response 16.9 for a discussion of traffic impacts from vehicle travel between the Millbrae Avenue Station and the I-280 corridor.

S67.2. The construction of a Millbrae station will divert traffic from stations to the north of Millbrae, but there is no analysis of that potential impact on local streets.

**Response.** Please refer to Responses 16.18, 16.32 and 16.79 for a discussion of traffic impacts to local streets, including diverted vehicles from BART stations to the north.

S68. MOREHOUSE, LESTER (2/15/95)

S68.1. I think by now you should have probably picked one and we could have argued about it instead of going through the same stuff again. You still don't know what you're going [to] do.

**Response.** The selection of a preferred alternative involves a constant balancing of costs, passenger service, environmental impacts, and public input. In 1992, the Metropolitan Transportation Commission preferred route, but the environmental consequences and the projected quality of service to the SFIA prompted consideration of a different alternative. This decision was made in April 1995 by the BART and SamTrans boards. However, as explained in Volume I of this document (FEIR/FEIS), other factors including cost considerations and coordination with the SFIA's large-scale expansion plans prompted yet a third preferred alternative. This final one, referred to as the Alternative VI Aerial Design Option, is the alternative BART and SamTrans have recommended be constructed.

S68.2. If my house gets taken, your idea of fair market value is not fair market value of the real estate and what it's really going to go for. Where am I going to end up? With land and housing costing what it costs today...

**Response.** The relocation laws and regulations specify the procedure for determining the value of property and relocation payments. There is also a provision for replacement payments to compensate a relocatee for the difference between current housing cost and the cost at the new location.

S69. MORSE, DORIS (MAYOR) (3/4/95)

S69.1. Millbrae believes that BART should be extended into the San Francisco International Airport and not near it....Although the citizens would prefer that no BART station be located in Millbrae, if there is to be a station, it should be at Millbrae Avenue....Millbrae will only support Alternative VI if all the adverse impacts are fully mitigated and those mitigations are fully funded by the BART extension project.

**Response.** The commentor's support for the BART extension into the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The LPA incorporates a BART extension into the airport and an ALRS directly to the terminals. The LPA also incorporates a station at Millbrae Avenue.

S69.2. Millbrae will be submitting a conceptual station plan with additional written comments, including our recommendations for mitigation measures. This station area plan has been endorsed by our Planning Commission, the BART Citizens Committee, and the city council as preferred to the area plan in the DEIR/DEIS Alternative VI.

**Response.** BART and SamTrans are prepared to work directly with the City of Millbrae to accommodate the majority of the refinements proposed in their Development Plan during the course of preparing the preliminary engineering document and the final environmental documents. Budget limitations and environmental issues associated with additional real estate acquisitions may pose some limitations on full accommodation of the proposed Plan.

**S70. NESBITT, BRYCE (2/15/95)**

S70.1. Option VI...ignores transit from the South Bay.

**Response.** Both the Alternative VI LPA and the Aerial Design Option LPA have a major BART/CalTrain intermodal station at Millbrae Avenue. This intermodal station would allow CalTrain passengers from the south to transfer to BART trains with destinations at SFIA, San Francisco, or the East Bay. Accordingly, neither Alternative VI nor its Design Option ignore transit from the South Bay.

S70.2. Transit south of the airport is going to be CalTrain for years to come, no matter what. Any proposal that ignores CalTrain and any proposal that adds additional transfers for CalTrain passengers will just strengthen the already formidable opposition to future South Bay BART extensions....Place a single transfer station in the best location and spend half the savings on an improved airport light rail system.

**Response.** The BART build alternatives presented in the BART extension DEIR/SDEIS do not ignore CalTrain service but anticipate increased CalTrain service that is the same as indicated in the TSM Alternatives. All of the BART build alternatives have only one transfer station between BART and CalTrain, except for Alternatives IV and V. Please refer to Response 66.111 for a discussion of CalTrain riders accessing SFIA.

**S71. O'MOHONY, ROSALIE M. (3/4/95)**

S71.1. The Sherman Lewis CalBART proposal should be carefully studied by BART and SamTrans directors.

**Response.** CalBART was first proposed in writing on November 16, 1994 by BART Director Sherman Lewis and later documented in the *CalBART Bay Area Rail Project Report* dated March 1995. The *CalBART Bay Area Rail Project Report* was first available while the DEIR/SDEIS was in the 60-day public comment period.

Major elements of the CalBART proposal including electrification of CalTrain from San Francisco to San Jose and the extension of CalTrain to Downtown San Francisco have been the subject of the *CalTrain San Francisco Downtown Extension/System Upgrade Final Report*, March 1994 by the Joint Powers Board and MTC. At the conclusion of the Upgrade Study, the Joint Powers Board selected Alternative 8B - Subway/Surface CalTrain Extension to Beale and Market as the Locally Preferred Alternative. An Environmental Impact Statement and Report is being prepared on this LPA and other alternatives by the Joint Powers Board.

Major elements of the CalBART proposal not studied in the *CalTrain San Francisco Downtown Extension/Systems Upgrade Study* were 15 minute headways (185 trains per day) and a subway alignment from the Millbrae CalTrain station under Highway 101 serving the proposed Airport

International Terminal and United Airlines Maintenance facility. Please refer to Response 13.4 for a discussion of the CalBART proposal.

- S71.2. BART options has too many stations and they are too close together. A Hickey station less than two miles from the Colma station is puzzling....

**Response.** The BART alternatives have two, three or four stations, and total lengths of the alternative varies between 5.7 and 8.0 miles. This corresponds to a distance between stations ranging between 2.0 and 2.9 miles. This is approximately the 2.0 mile average distance between BART stations in the East Bay from Richmond to Fremont, and is an appropriate distance between stations for a rapid transit system like BART in urbanized suburban areas like northern San Mateo County.

The proposed Hickey Station is 1.7 miles south of the Colma Station. During the AA/DEIS/DEIR, the City of South San Francisco requested that the Hickey Station be studied as part of the Alternatives Analysis Study. The City Council of South San Francisco supports the Hickey Station and is opposed to the Chestnut Station.

- S71.3. Our council endorsed the TSM because it would respond to our county's transit needs most equitably and it is most fiscally prudent.

**Response.** The commentor's preference for Alternative II is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

## S72. PAGLIARO, FRANK (2/18/95)

- S72.1. This report we find to be extremely deficient as far as the effects that tail track, 1,500 feet of it will have upon our residents. There is a residential area immediately adjacent to this proposed tail track as well as nursing homes.

**Response.** Please see Responses 14.77 and 186.14 for a discussion of these issues.

- S72.2. The...effect the BART station on Millbrae Avenue will have upon the intersection of El Camino Real and Millbrae Avenue and simply says it will go to Level E...but there is nothing in this report that says how will that be mitigated?

**Response.** Please refer to Response 6.6 for a discussion of mitigating traffic impacts at the intersection of El Camino Real/Millbrae.

- S72.3. Immediately adjacent to most of these proposals is another enormous project to be built, and that is the extension of San Francisco International Airport. You cannot consider the two projects separately, and the entire report is deficient because of that.

**Response.** Please refer to Response 14.5 for a discussion of how the traffic from the planned expansion of the SFIA was included in this DEIR/SDEIS.

- S72.4. From a financial standpoint, we are extremely concerned of the effect upon SamTrans...with a buy-in of a hundred million or \$200 million, as well as SamTrans being forced to make up for any deficiency in BART fares into this county, it has the potential for bankrupting or severely affecting the financial reliability of SamTrans.

**Response.** Please refer to Response 10.1 for a discussion of SamTrans' capacity to support its portion of the project.

**S73. PALAFOX, JOSEFINA (2/15/95)**

S73.1. We support Alternative VI with a bored tunnel option to San Bruno.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

**S74. PALLAS, CHRIS (2/15/95)**

S74.1. Where's BART going to get all this money to do what is right for our communities?

**Response.** BART and SamTrans have worked closely with each community involved in the extension project. The design of the Alternative VI LPA selected in April 1995, reflects the concerns of citizens and jurisdictions in terms of alignment, station design, vertical profile, station site layout, etc.

Please refer to Response 14.93 for a discussion of financial planning for the project, and Response 19.21 for a discussion of locally borne costs.

S74.2. What is the cost to the county per year?...Can the county effect it?

**Response.** Please refer to Response 10.1 for a discussion of SamTrans' financial capacity.

S74.3. How is it going to affect our other transportation systems here?

**Response.** The impacts to other transit systems in San Mateo County, including CalTrain and SamTrans, are described in Section 1.3, Transit Impact Assessment and Mitigation, on pages 3.1-5 to 3.1-87 in Section 3.1, Transportation, of the DEIR/Technical Appendix. The impacts to vehicle travel in the study area for the BART extension are discussed in Subsection 1.4, Traffic Impact Assessment and Mitigation, on pages 3.1-87 to 3.1-162 in Section 3.1, Transportation of the DEIR/Technical Appendix.

S74.4. Not one penny from our taxpayers' money in San Mateo County should go in any way to subsidize the expansion of BART into our cities.

**Response.** In November 1987, the voters of San Mateo passed Measure K (by 61 percent) authorizing the San Mateo County Transit District to construct BART passenger stations and related facilities south of the proposed Colma station and at a location near the San Francisco International Airport. In November 1992, the voters passed Measure B (by 75 percent) in support of San Mateo County negotiating a contract to extend BART throughout the County. Please refer also to Response 47.19 for a discussion of BART funds being spent outside of the BART District.

**S75. PARKER, SHERWOOD (2/15/95)**

S75.1. Alternative VI in the tunnel to the airport has one great advantage over many of the others in addition to having some local support...Riders will actually ride it to the airport.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

S76. PEEPLES, CHRISTIAN (2/15/95)

- S76.1. Consider an alternative that includes CalTrain, electrified with direct airport access, and with an extension to downtown San Francisco.

**Response.** The commentor's preference for the TSM Alternative is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). As noted in Response 2.7, the BART extension does not preclude CalTrain improvements, including extending CalTrain into San Francisco.

S76.A. PHILIP, KAREN (3/4/95)

- S76A.1. The locally preferred alternative and its design options and Alternative III...[places] the ancillary facilities in close proximity to the school and the additional tail tracks activity that will be just adjacent to the school.

**Response.** No significant public safety issues were identified in the DEIR/SDEIS for the Lomita Park School for the Airport Intermodal Station and tailtrack under the 1992 LPA, its design option and Alternative III. Because of the third rail, the BART line and tailtrack area would be fenced off from any public access.

- S76A.2. Alternatives IV and V would displace homes in the Center Street area and as a result, reduce enrollment at Lomita Park School and Taylor Middle School and thus affect income to the Millbrae School District in a loss of approximately \$400,000. Alternative VI would displace apartments in the Garden Lane area and would thus reduce enrollment to the Spring Valley School and to Taylor Middle School and also in income for the Millbrae School District of up to approximately \$400,000.

**Response.** Please refer to Response 16.34 for a discussion of displacement and impacts to local school districts.

- S76A.3. A facility study to determine the feasibility of continued operation of Lomita Park School. If it is found that continued operation is not feasible, funding for relocation of the school site and transportation for displaced students may be requested.

**Response.** Please refer to Response 16.34 regarding operations at Lomita Park School.

- S76A.4. If continued operation is feasible, a sound wall for safety and noise, parking restrictions, and traffic control [would be needed] due to increased traffic adjacent to the school.

**Response.** Under all BART build alternatives, the BART right-of-way would be secured with fences, walls or other measures to prevent access to the BART tracks. Under Alternatives IV and V, as well as the Aerial Design Option LPA, where the BART tracks are in proximity to the Lomita Park School, a soundwall would be constructed to reduce noise impacts to an insignificant level.

Under Alternatives IV and V, where the Millbrae Intermodal Station would be located in the general vicinity of the Lomita Park School, sufficient parking supply is provided to satisfy projected year 2010 demand. Additional traffic on San Antonio Avenue accessing the Millbrae Intermodal Station would be insignificant and limited to patrons in the immediate vicinity of the school including individuals from the Lomita Park neighborhood and the southern portion of the San Bruno Park neighborhood.

- S76A.5. Finally, reimbursement for the loss of the \$400,000 in revenue due to a decreased enrollment for Alternatives IV and V or for Alternative VI. And reimbursement for the cost of reconfiguration for the school district.

**Response.** Please refer to Response 16.34 for a discussion of impacts to local school districts.

**S77. PINCUS, MELVIN (PUBLIC HEARING 3/4/95)**

- S77.1. To each destination, I traveled faster [on BART] than I could by auto, cheaper than by car or train.

**Response.** In certain cases, BART service between two locations will be faster and less expensive than travel by automobile although this may not be true in every case.

- S77.2. With BART, I can still look forward to the electrification of CalTrain -- that's one of the possibilities -- which will be complimentary to the entire transportation system of the West Bay and as necessary under any transportation planning.

**Response.** The commentor is correct. With or without the BART extension, electrification of CalTrain service is a possibility.

**S78. PIUTON, KALINI (2/15/95)**

- S78.1. [I give] full support [to]...Alternative VI, which means the bored tunnel will go through the City of San Bruno without taking any of our homes.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

**S79. RICHARDSON, MINA (2/15/95)**

- S79.1. I live at 127 Cherry Avenue, South San Francisco....The one that is going to impact me directly is going to be...vibration. How is the BART traveling underground by two schools going to mitigate that problem with the vibration?

**Response.** BART's subway alignment would be designed to mitigate noise and vibration effects to below a level of significance to residents along Cherry Avenue. Please refer to Responses 16.63 and 19.11 for further discussion of noise and vibration mitigation.

- S79.2. When they do these EIRs, is there some agency that they go to seek this type of opinion?

**Response.** The preparation of comprehensive environmental documents, such as the DEIR/SDEIS, involves considerable consultation with local, state, and federal agencies. These

agencies both provide technical input and guidance and their opinions can be actively solicited throughout the process. In the case of noise issues, each of the local jurisdictions along the BART alignment have policies and standards to define acceptable noise levels. In addition, professional organizations such as the American Public Transit Association define acceptable noise and vibration criteria for transit operations.

S80. ROGERS, ELIZABETH (3/4/95)

S80.1. The residents of Bayside Manor are concerned about what kind of riffraff BART will bring to our small, quiet neighborhood. Our neighborhood has almost no crime, and we want to keep it that way.

**Response.** Please see Responses 14.57 and 16.2 for a discussion of crime.

S80.2. Please figure out a way you can put BART into the San Francisco Airport without disturbing the homes and residents of the Bayside Manor area.

**Response.** The commentor's concern over impacts in the Bayside Manor area is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). Under the LPA, the BART would pass to the west of the Bayside Manor area.

S81. ROMAINE, ANN (3/4/95)

S81.1. My great hope is that the entire County of San Mateo could be spared any destruction and any incision by what I think is an unnecessary money waster.

**Response.** The commentor's opposition to the BART extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

S81.2. BART has no money for San Mateo County spending....This money that would come from the U.S. government is my money and it's your money. It's been paid through taxes.

**Response.** The federal government is participating in the cost of this project. The FTA would contribute approximately 64 percent of project costs of the Aerial Design Option LPA. Since San Mateo County is outside of the BART District, BART is prohibited from spending money on this extension. SamTrans is the co-sponsor of the project, and will contribute \$99 million to construction costs.

S81.3. I would like BART to be content with what they have done at Colma and let CalTrain go ahead and expenses that we could feel like we could afford.

**Response.** The commentor's opposition to all of the build alternatives is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. As noted in Response 2.7, the Alternative VI Aerial Design Option was selected as the LPA by both boards. Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are described in Response 79.18.

S82. ROMAINE, RONALD D. (3/4/95)

S82.1. I strongly support BART's alternative Plan No. II, but I oppose BART's alternative Plan No. VI.

**Response.** The commentor's preference for Alternative II and opposition to Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

S83. SACCO, ANTHONY (3/4/95)

S83.1. We strongly supported and still support Alternative VI. We think that's the most direct. It is the least disruptive and as far as endangered species, it is the least disruptive of those. It also will carry more passengers.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

S84. SCHWARTZ, RICHARD (PUBLIC HEARINGS 2/18/95, 3/4/95)

S84.1. The impact of the proposed stations in Millbrae on traffic patterns which are not necessarily addressed in the environmental impact report...I think it's inevitable that there will be huge congestion on all roads leading to the Millbrae station, including El Camino Real, California Drive, and Rollins Drive, in addition to Millbrae Avenue and Highway 101.

**Response.** The impacts of traffic in the vicinity of the proposed Millbrae Avenue Station under Alternative VI and the Alternative VI Aerial Design Option were analyzed carefully and thoroughly. Many intersections in the vicinity of this station were analyzed and only the intersection of El Camino Real/Millbrae would have a significant impact under Alternative VI and the Alternative VI Aerial Design Option. Please refer to Response 6.6 for further discussion of the El Camino Real/Millbrae intersection; Response 10.15 for a discussion of traffic impacts at the Rollins/Millbrae intersection; Response 10.17 for a discussion of traffic impacts at the Millbrae Avenue Interchange with Highway 101; Response 16.9 for a discussion of traffic impacts related to vehicles using local streets between I-280 and the Millbrae Avenue Station under Alternative VI and the Alternative VI Aerial Design Option; and Response 16.27 for a discussion of traffic impacts along California Drive in the vicinity of the Millbrae Avenue Station under Alternative VI and the Alternative VI Aerial Design Option.

S84.2. Many commuters who currently use Highway 280 to commute to San Francisco will inevitably exit at Trousdale Drive to hook up to the BART station because the next nearest BART will be 13 miles north at Daly City. So, I believe that Trousdale Drive will become a highway.

**Response.** Please refer to Response 16.18 for a discussion of the traffic impacts on Trousdale from vehicles traveling between I-280 and the Millbrae Avenue Station under Alternative VI and the Alternative VI Aerial Design Option.

S84.3. The intersection of Millbrae Avenue and El Camino is already highly congested in the peak morning commute hours and with the BART station on Millbrae Avenue, gridlock seems inevitable.

**Response.** The traffic impacts to the intersection of El Camino Real/Millbrae under Alternative VI and the Alternative VI Aerial Design Option were analyzed in the DEIR/SDEIS and FRDEIR/S#2DEIS and found to be significant. Please refer to Response 6.6 for further discussion of the El Camino Real/Millbrae intersection.

- S84.4. Many commuters from North Burlingame, myself included, use Millbrae Avenue as their principal access to Highway 101, but when this becomes deluged with traffic, it's inevitable, I believe, that we will be diverted to Broadway Avenue, which in both directions will also become a parking lot...Having parking lots in the terminus on Millbrae Avenue is going to result in Millbrae and Burlingame becoming the parking lots for San Francisco.

**Response.** Traffic assignments made to analyze traffic impacts of all alternatives considered changes in choice of routes as a result of congestion. Intersections along Broadway in Burlingame were analyzed. Please refer to Responses 14.39 and 14.41 for a discussion of traffic impacts for Rollins/Broadway and California/Broadway. In addition, when the intersection of El Camino Real/Broadway was analyzed, no significant traffic impacts were found under any of the BART build alternatives. The level of service at El Camino Real/Broadway was estimated to be LOS A during both the A.M. and P.M. peak hours in 2010 under Alternative VI and the Alternative VI Aerial Design Option. Other level of service results are summarized in Appendix C of the DEIR/Technical Appendix.

- S84.5. Extend CalTrain into San Francisco into the downtown area, electrify the system, and hook up BART and the train system at that point.

**Response.** Please refer to Response 13.4 for a discussion of the CalBART proposal.

- S84.6. I find it particularly disturbing that as much as \$1.3 billion is being proposed for a project that will ironically result in massive traffic jams and clogs on Highway 101. It seems to me that the goal of mass transit is to reduce traffic, not to exacerbate it and that as a society, we will be therefore ill served by the proposed BART extensions.

**Response.** Please refer to Responses 10.17 and 14.93 for discussion of cost estimates related to the BART-San Francisco Airport Extension. Traffic analyses relating the impact of the BART-San Francisco Airport extension to traffic conditions on Highway 101 project less congestion by promoting alternatives to single-occupant automobile usage. Please refer to Response 10.17, 17.25, and 107.7 for further discussion of projected estimates of the BART-San Francisco Airport extension on traffic impacts related to Highway 101.

- S84.7. The report also said -- offers an alternative. The TSM alternative says in the report will significantly reduce traffic on Highway 101. It's the only alternative proposed that actually reduces traffic, and it's stated numerous places in the report. [The TSM] costs a fraction on the proposed BART extension, is environmentally sound, uses the existing right-of-ways, and avoids the problems noted by -- numerous problems, displacement of large numbers of low-income families, environmental issues, loss of many low-income housing units, losses of businesses, destruction of commerce, etc.

**Response.** The commentor's preference for Alternative II is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

#### S85. SHOECRAFT, DON (3/4/95)

- S85.1. The Chamber...support[s]...a modified Tanforan, BART-only station, strictly on the condition that it is part of a complete BART package which includes a bored or mined tunnel that would pass

beneath downtown San Bruno. This agrees with the position taken by the majority of the San Bruno City Council last month...

**Response.** The commentor's preferences are noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). Under this option, there would be a BART-only station at Tanforan. A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

S86. SIMON, ED (3/4/95)

S86.1. The City of San Bruno declares and resolves that the only build alternative contained in the DEIR that is acceptable to San Bruno is Alternative VI....In addition, a bored tunnel or other engineered equivalent must be constructed south of Euclid Avenue to Angus Avenue which will not disturb surface streets or result in cost to our city.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). A bored tunnel through San Bruno was determined to be infeasible for a number of reasons, as discussed in Response 17.68.

S87. SKINNER, JOAN (2/18/95)

S87.1. The problem is, we are having a hearing to comment on a report that most of us don't have access to.

**Response.** The DEIR/SDEIS was distributed to a number of locations throughout the project corridor. The distribution list in the Summary DEIR/SDEIS indicates the documents are available at each of the local jurisdictions, local libraries, and schools.

S87.2. I think you need to extend these hearings, have some more of them, and, by all means, get some full copies of the report out to the people who requested them, as I did.

**Response.** BART held three public hearings on the DEIR/SDEIS to avail the public an opportunity to offer their opinions. In addition, the normal 45-day review period was extended to 60 days. Furthermore, documents were sent to all who made requests. During this period, the public was invited to submit written comments.

S87.3. I would also like to request that at some point where you have one of these hearings that the people be allowed to speak ahead of the public officials.

**Response.** The commentor's remarks concerning protocols employed at BART public hearings are noted. The protocols were established prior to the hearings and the hearings have already taken place.

S88. SKINNER, WALTER (2/18/95)

S88.1. I think it is outrageous that the officials have decided to cut off the public comment on March 13th, after only three hearings, when the public, for the most part, has not had access to this lengthy and complex document.

**Response.** Please refer to Response S87.2 regarding the public's opportunity to comment.

S88.2. I would suggest you delay a decision and delay the close of public comment by at least three months.

**Response.** Please refer to Response S87.2 regarding the public review period. It is noted that BART has already extended the public comment period.

S89. SKJONSBY, DOROTHY (3/4/95)

S89.1. We feel a real commitment to seeing that our nursery school not be taken with Plan IV and V...If for some reason, Proposal 4 and 5 go through, we are going to stand firm in being relocated....

**Response.** Please refer to Responses 123.1 and 159.1 regarding the effects of Alternatives IV and V on the nursery school.

S90. SPENCER, VONNIE (3/4/95)

S90.1. I don't really call bringing BART to Millbrae progress.

**Response.** The commentor's opposition to the BART extension through Millbrae is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The LPA incorporates a joint CalTrain/BART station at Millbrae Avenue.

S90.2. BART took me one hour and a half from my front door to San Francisco...then [I] had to drive another ten miles to my home from the front door of my home to the front door of work, was one and a half hours and it was one hour, when I drove my own car.

**Response.** The commentor states that it was quicker for her to drive from her home in Milpitas to her workplace in San Francisco than to drive to BART in Fremont, and from that location ride BART to San Francisco, then finally accessing the workplace by a mode that was not stated. It is true that the approximate travel time between the Fremont BART station and the Civic Center Station, the farthest of the four downtown San Francisco stations, is 50 minutes. However, one advantage of traveling on BART is that train on-time performance is over 95 percent, while traffic congestion on highways during commute periods often results in varying and longer driving time between Milpitas and San Francisco.

S91. SPINELLI, MIKE (3/4/95)

S91.1. The significant change has been southbound travelers. San Mateo County to Santa Clara travelers have increased by 25,000 a day in the last ten years -- an increase of 33 percent. This project not only fails to address this change in commute patterns, but makes conditions worse by seriously degrading CalTrain service to the south.

**Response.** Providing an intermodal connection between BART and CalTrain will improve transit service to San Mateo and Santa Clara Counties because current and potential BART patrons could transfer to CalTrain for train service to these two counties. CalTrain service would not be degraded under any of the BART build alternatives. The frequency of trains would increase from 60 trips per day, under the No Build Alternative, to 86 trips per day, under the BART build alternatives and the TSM Alternative.

S91.2. The TSM is the only alternative that addresses the real transit need of the Peninsula. The TSM is the only alternative that shows a decrease in freeway traffic. With the TSM, the service level, LOS, is consistently better than any BART build alternative, especially where the existing LOS is D or worse.

**Response.** The commentor's preference for Alternative II is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

S91.3. According to BART figures, CalTrain carries 20,800 passengers per day in both directions, with 6,240 destined for or leaving San Francisco. Yet BART assumes that there will be a 19,900 BART CalTrain transfer per day in the base year. That amounts to 96 percent of the total CalTrain ridership. That conclusion is without merit.

**Response.** The number of CalTrain riders with a downtown San Francisco destination who transfer to BART is based on the predictions of the MTC travel demand model. In this model, most CalTrain riders would have a faster trip to San Francisco on BART because the downtown BART stations are closer to more work destinations than the CalTrain terminus at 4th and Townsend Streets is to those destinations. In addition, CalTrain requires a transfer to another transit system.

CalTrain boardings in 1993 were estimated to be 20,800 boardings under the No Build Alternative and 36,500 under Alternative VI. Transfers between CalTrain and BART under Alternative VI in 1993 were estimated to be 19,700 (revised from 19,900 in the DEIR/SDEIS), which includes persons going from BART to CalTrain, as well as from CalTrain to BART. The 19,700 transfers under Alternative VI include 3,500 CalTrain riders who use BART to access SFIA but who, under the other build alternatives, would ride on the proposed ALRS. The number of transfers, which includes travel in both directions between BART and CalTrain, cannot be divided directly by CalTrain boardings to obtain a percent of CalTrain ridership who would also ride BART. This is particularly so when using the CalTrain ridership from a different alternative than the number of transfers.

The column headed 1993 Base Year of Table 3.1-65 on page 3.1-83 of the DEIR/Technical Appendix is revised as shown below:

<u>Weekday Transfers between Operators</u>	<u>1993 Base Year</u>
BART-CalTrain	<u>19,900 19,700</u>
BART-ALRS (excludes walkers)	<u>5,100 1,500</u>
CalTrain-ALRS <sup>(1)</sup>	N/A

S91.4. There is no analysis in this document of the need for end of line tracks or yard facilities for CalTrain terminus in Millbrae.

**Response.** Terminating CalTrain in Millbrae was not proposed as an alternative or considered in the DEIR/SDEIS. All of the BART build alternatives include an intermodal CalTrain/BART Station. All of the alternatives assume that CalTrain service will continue to terminate at Fourth and Townsend in San Francisco.

S92. STOCKTON, ROBERT (2/15/95)

S92.1. Mr. Stockton's oral comments are the same as his written comments. Please see Responses 224.1 and 224.2.

S93. STOLL, GERHARD (3/4/95)

S93.1. The solution really is that we must recognize that as BART moves down the Peninsula, CalTrain stops, temporary transfer stations are built right where the two tracks meet, and one system goes on, so that anybody who wants to board the train in San Jose and go to Berkeley can do it easily. We can save CalTrain from itself.

**Response.** The commentor's concerns are noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

S94. SWEENEY, MIKE (3/4/95)

S94.1. If I had my druthers, I would not have BART extended, but if a choice has to be made, it has to be Alternative VI.

**Response.** The commentor's support for Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process)

S94.2. The mitigation that's going to be occurred in Millbrae, San Bruno, Burlingame, South City, because the airport isn't going to give us a dime to take care of the traffic problems we're going to pick up and the police problems we're going to pick up.

**Response.** Please see Response 19.21 for a discussion of locally borne costs of the BART-San Francisco Airport Extension. Significant traffic impacts were defined in the DEIR/SDEIS and mitigations were provided for these impacts. Significant and unavoidable impacts are noted. Specific mitigation measures for significant impacts to intersections in the study area are described in the DEIR/Technical Appendix. For example, mitigation measures for significant impacts to local intersections under Alternative VI are provided on pages 3.1-159 through 3.1-162 of the DEIR/Technical Appendix. Please refer to Responses 14.57 and 16.2 for a discussion of crime as it relates to the BART extension.

S95. THOMAS, OWEN (2/15/95)

S95.1. These plans involve 4,000, 5,000 spaces of parking and I wonder who is paying for that parking....

**Response.** The costs of the project would be largely borne by federal contributions (approximately 64 percent). SamTrans will also be providing \$99 million towards the construction of the project. For a discussion of each contributor's share, please refer to Table 6-4 in the Summary DEIR/SDEIS, as well as the Financial Analysis in Volume I of this FEIR/FEIS.

S95.2. I would like to support the TSM....

**Response.** The commentor's preference for Alternative II is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when

choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

S96. TORCZYER, JEROME (2/15/95)

- S96.1. At Tanforan they have got elevation separations that need to be crossed and you've built a station in Colma that no interface has been discussed ever about sharing with BART. Your station drawings here call for an eight foot wide sidewalk but SamTrans says it takes 12 feet wide if you are going to use a wheelchair lift from a bus. These other factors have not been designed into some of these plans that are here right now.

**Response.** The station plans in the DEIR/Technical Appendix are schematic and intended to indicate the general layout of station features. Subsequent preliminary engineering and final design documents to be developed will conform to state, federal, local and public agency accessibility requirements.

- S96.2. I would like BART to go into the airport....

**Response.** The commentor's support for the BART extension into the airport is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The LPA incorporates a BART extension into the airport and an ALRS directly to the terminals.

S97. TRAPP, ONNOLEE

Ms. Trapp testified on behalf of the County Council of the League of Women Voters of San Mateo County. Her oral comments include the same comments made in the Council's letter. Please see Responses 41.1 through 41.40.

S98. TRIANO, GEORGE (3/4/95)

- S98.1. The Town Center is opposed to a BART station at Tanforan because we believe the station will be highly disruptive to the operation of the shopping center and would have a negative impact on the revenues to the City of San Bruno.

**Response.** The City of San Bruno and Tanforan Park Shopping Center submitted a new development plan for the Tanforan Station as part of their formal letter, which we understand responds to the concerns Mr. Triano expressed regarding disruption of the shopping center operations. BART will work with involved parties during final engineering to refine the plans to further minimize any adverse impacts on adjacent property owners during construction as well as operation of the station facilities. Please refer to Responses 17.4, 17.5 and 17.6 for further discussion of the revised Tanforan Station under the Alternative VI LPA and the Aerial Design Option LPA.

- S98.2. The Draft EIR and Supplemental Draft EIS does not include any airport parking in the estimate for parking demand for the Tanforan station.

**Response.** Please refer to Response 10.10 for further details on air passenger parking at the BART extension stations. FTA funding does not make provisions for transit stations to be used for airport passenger parking. The demand for air passenger parking can not be included in the demand forecast because of this requirement. BART will take all steps necessary to prevent air passenger parking at the BART stations in South San Francisco, San Bruno, and Millbrae.

S98.3. We believe the proposed 1,000 parking spaces at the BART Tanforan station in Alternative VI and the proposed 1,300 parking spaces at the Tanforan station in the locally preferred alternative, are woefully inadequate.

**Response.** Please refer to Response 241.12 for a discussion of the adequacy of the parking supply at the Tanforan Station, including parking under the 1992 LPA and Alternative VI.

S98.4. The increased traffic and parking shortages will be very inconvenient for our customers. We expect sales to decline significantly and some of our merchants may not be able to survive. If this occurs, there could be a major reduction in sales tax revenues to the city.

**Response.** Please refer to Response 17.75 for a discussion of benefits associated with businesses in close proximity of BART stations. Please also refer to Response 14.25 for a discussion of spillover parking from BART stations along the project alignment and the need for permit parking programs.

S98.5. We are also very concerned about the negative impacts of construction. We expect construction to drive away a number of customers, resulting in significant reductions in sales and a decline in sales tax revenue to the city.

**Response.** Please refer to Response 17.75 for a discussion of benefits associated with businesses in close proximity of BART stations. Please refer also to Response 157.3 for a discussion of traffic impacts near the Towne Center Shopping Center during construction.

S98.6. If, however, a decision is made to move ahead with a station at Tanforan, then we believe the station should satisfy all the following conditions. The station should be located across the street from the existing Tanforan parking garage as proposed in Alternative VI and the Draft EIR and SDEIS. The parking is substantially increased and a comprehensive effective plan for dealing with long-term airport parking is developed. BART pays for direct access from Huntington Avenue to 101. BART pays for all needed parking enforcement at the Town Center parking lots. BART compensates the owners of the Town Center for reductions in property values and the merchants for lost revenues resulting from the construction and operation of Tanforan Station.

**Response.** Please refer to Response S98.1. BART has no plans to pay for direct access from Huntington Avenue to Highway 101. This is not part of the any BART project description, nor is it needed to mitigate any impact.

#### S99. URBACH, ROSE (PUBLIC HEARINGS 2/18/95, 3/4/95)

S99.1. Alternative 1, no build, means no BART, and should be considered and adopted.

**Response.** The commentor's support for Alternative I is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

S99.2. BART wants San Bruno Avenue and Huntington to be widened again, another freeway. What are the impacts on our neighborhoods?

**Response.** Please see pages 3.2-93 and 3.2-96 of the DEIR/Technical Appendix for a discussion of the impacts of Alternatives IV and V, which would involve the widening of San Bruno Avenue.

S99.3. xal-3Proposed electrification of CalTrain is a great idea and should be pursued.

**Response.** Your support for the proposed electrification of CalTrain and the CalBART proposal is noted. Please refer to Response 13.4 for a discussion of the CalBART proposal.

S99.4. BART's \$1.3 billion doesn't include buying of equipment, maintenance, and running the system and buying into the system.

**Response.** The conceptual capital cost estimates by definition do not include maintenance, operating, and buy in costs. The estimates do include equipment to be installed into the system and new vehicles. Operating and maintenance costs are addressed in Chapter 6 of the Summary DEIR/SDEIS and the Financial Analysis, Volume I of this FEIR/FEIS.

S99.5. What are the impacts on [Euclid Avenue between Huntington and El Camino] and this neighborhood known as San Bruno Park First Addition?

**Response.** The DEIR/SDEIS did not identify any impacts of the project on Euclid Avenue.

S99.6. CalTrans should have on file a petition of 500 names of San Bruno residents that oppose having the train station moved to under Freeway 380. It would impact our First Addition neighborhood.

**Response.** Your opposition and a petition opposing a CalTrain Station under I-380 are acknowledged. A CalTrain station under I-380 is included as part of the alternatives definition in the 1992 LPA and Alternative II and III. Impacts of the CalTrain station on the Fifth Addition neighborhood are documented in the DEIR/Technical Appendix.

S99.7. All these comments were made again and again for the past three years at all the different hearings, but always, and I quote, we are here to take your comments, but no questions will be answered. And it keeps on and on.

**Response.** All verbal comments made at the public hearings are addressed by BART and SamTrans in Volume II and III of this FEIR/FEIS.

S99.8. Are all comments, verbal or written, recorded and will they be responded to, is one question.

**Response.** All verbal comments made at the public hearings were recorded and transcribed by a court reporter. These comments, along with the letters, are addressed by BART and SamTrans in Volumes II and III of this FEIR/FEIS.

S99.9. Keep BART in Colma...Why not promote CalTrain and its extension into downtown San Francisco?

**Response.** Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies justifying the need for a rail project south of Colma are described in Response 79.18. The BART and SamTrans boards selected the Alternative VI Aerial Design Option as the LPA in November 1995 (see Response 2.7 for a discussion of the LPA selection process).

S99.10. Why haven't these studies zeroed in on the specific damages and destruction to neighborhoods such as San Bruno Park's 1st Addition where I live?

**Response.** Please see page 3.2-96 of the Technical Appendix for a discussion of the impact on San Bruno Park of the I-380/San Bruno Station under Alternative V.

S99.11. Our street, Euclid Avenue, between El Camino and Huntington, carries approximately 1,700 cars daily and about 220 during commuter hours. This street has been targeted as a boring tunnel 20 feet north of it. What are the impacts of this or other -- for Euclid?

**Response.** Please refer to Response 17.26 for a discussion of the potential traffic impacts to Euclid Avenue. Construction impacts would occur along Huntington Avenue north of the intersection with Euclid Avenue with a cut-and-cover subway. Access to Huntington would remain open during construction. Please refer to Response 17.62 for further discussion of impacts along Huntington Avenue during construction of a cut-and-cover subway.

S100. VALENTE, NORMA (3/4/95)

S100.1. My backyard is Junipero Serra and Hickey...and my walls vibrate now and I have double-paned windows in my home all throughout. And the noise, we have to keep the windows closed at night....

**Response.** BART's proposed alignment is approximately 3,000 feet from the intersection of Hickey and Junipero Serra. At that distance, BART will not increase the current levels of noise or vibration.

S100.2. [At the] intersection, sometimes in the daytime, in the morning when I go out there, you can really smell the fumes from the cars that are at the stop light.

**Response.** Vehicular emissions are greatest near roadway intersections as a result of the higher emission rates that occur during idling and acceleration. Although the comment refers to odors, odorless carbon monoxide (CO) is the air pollutant of greatest concern on the local scale. For these reasons, the EIR/EIS air quality analysis focuses on CO concentrations near roadway intersections. Please refer to Section 3.10 of the DEIR/Technical Appendix for a discussion of local CO impact near roadway intersections. Please also refer to Response 16.80 for further details of localized air impacts.

S100.3. If you are planning to put some kind of traffic signal between Junipero Serra and El Camino, which is Hilton Street -- because otherwise, the people won't be able to get out of Hilton because they come so fast off of -- on Hickey to El Camino, the traffic goes really fast and we want to see a traffic signal put up there on Hilton also.

**Response.** Please refer to Response 15.1 for a discussion of the BART-related traffic on Hickey Boulevard between I-280 and El Camino Real, which includes the intersection of Hickey/Hilton, and Response 19.38 for a discussion of traffic impacts at the intersection of Hickey/Hilton.

S101. VAN PELT, STEVE (2/18/95)

S101.1. I think we need to take into account that we not block the possibility of high speed rail trains along the existing CalTrain right-of-way.

**Response.** CalTrain tracks remain continuous through common BART/CalTrain corridors, thus, the possibility of considering high speed trains is not precluded. It must be recognized, however, that high speed train feasibility is dependent on technical details which, at present, are unknown. In addition, the commentator is referred to Response 155.5 for additional discussion of high speed rail.

S101.2. From the commuter's aspect, I favor more parking [at] the airport. I favor more parking east of 101.

**Response.** The implication of this comment is that less parking is favored at the proposed BART extension stations. MTC's mode choice model determined the mode of access to the proposed BART extension stations. Transit service, including SamTrans buses, was increased to ensure that supply was not a constraint to potential demand. If parking were to be decreased, then other significant impacts, such as spillover parking and other disruptions to the local communities, would require mitigation that would lead to increasing the parking supply.

- S101.3. I would eliminate the stations in South San Francisco and in San Bruno. I would put these stations east of the freeways. I don't understand why we haven't explored routes that would parallel Railroad Avenue and the creek down here....I say BART to the airport, but no further.

**Response.** Please refer to Response 2.7 for a discussion of the selection process of alternatives considered during the EIR/EIS process.

**S102. WARD, JOHN (3/4/95)**

- S102.1. [Under] Alternative VI...the tracks leave the airport, continue south, go under 101, and directly under the sidewalks and street of Santa Paula Avenue in the North Millbrae area. Now just south of that area is total vacant lots -- no residences. And I can't understand why they cannot utilize that area to make the bore and the tunnel, rather than to directly under the front yards of the residences in the North Millbrae area.

**Response.** The route selected for Alternative VI is partly determined by the design speed of the BART trains. The design speed in this area dictates that a certain minimum radius be used for the curves at this point. Every attempt has been made to minimize the passage of BART easements below existing residences. At the point in question, the BART alignment is as far away from the existing private property in the vicinity of Santa Paula Avenue as is possible while still avoiding the edge of private property in the vicinity of Nadina Avenue farther south.

Please refer to Response 239.1 for a discussion of location of the alignment.

- S102.2. I am also against Alternative IV or any station that would center around Center Street.

**Response.** The commentor's opposition to alternatives that include a Center Street Station is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The new LPA does not include a Center Street Station.

**S103. WAXSTEIN, SAM (2/15/95)**

- S103.1. I want to point out I don't understand why nobody else has addressed the problem of luggage. BART is well known to be good for commuter use, but I don't think so, not for passengers to San Francisco with luggage....People will not use BART if the system is a hassle.

**Response.** The commentor's concerns regarding passenger's luggage is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). To facilitate passengers carrying luggage, the LPA incorporates a BART station in the airport and an ALRS directly to the terminals.

- S103.2. BART campaigned on no new taxes when they were trying to get in here. But who pays? The cities that are torn up with street work, traffic, policing, pollution, the cities will pay for that.

**Response.** The construction period for any major element of public infrastructure is difficult under any circumstances. Street disturbances, traffic congestion, noise, and dust will undoubtedly be evident at and near construction sites. Some of the costs, financial and social, of these temporary disturbances will be borne by cities and citizens. BART and SamTrans will make every effort to minimize disturbances to neighborhoods and commercial districts, and to make appropriate reimbursements.

- S103.3. Now, you have six stations for six and a half miles. Daly City, Colma, South San Francisco, San Bruno, the airport, Millbrae. I think that's a little overkill for six and a half miles, six stations. You could combine one from South San Francisco and San Bruno.

**Response.** The alignment from the existing Daly City BART Station to the Millbrae Avenue Station, under Alternative VI, is 9.6 miles not 6.5 miles. This includes the mileage to cross under Highway 101 to the Airport International Terminal Station and back under Highway 101 again to the CalTrain right-of-way.

The BART alternatives south of the Colma Station have two, three or four stations with lengths between 5.7 and 8.0 miles. This corresponds to a distance between stations of between 2.0 and 2.9 miles. This is approximately the 2.1 mile average distance between BART stations from Richmond to Fremont in the East Bay, and is an appropriate distance between stations for a rapid transit system like BART in urbanized suburban areas like northern San Mateo County. BART Extension Planning staff believes that the BART extension stations are spaced appropriately and that the South San Francisco and San Bruno stations should not be combined.

Further, the City Councils of South San Francisco and San Bruno support separate stations in their communities. The City Council of South San Francisco supports the Hickey Station and the City Council of San Bruno supports a station located at the Tanforan Park Shopping Center as envisioned in the Hapsmith Plan.

- S103.4. Now, in your Alternative III and IV, you have the Tanforan Station at the end of Sneath Lane....That's where the station should be because it's opposite industrial land and not opposite homes. From [Tanforan] you tunnel through San Bruno. No grade separations, no tearing up streets -- tunnel. And then you can use the rest of Alternative VI to go to Millbrae Avenue station.

**Response.** The City of San Bruno, in coordination with the Tanforan Park Shopping Center and the nearby residents, has submitted a new development plan for this station. This plan is understood to be responsive to your concerns regarding adverse impacts on the homes in this area. The station plan at Sneath, which uses the existing shopping center overflow parking area for access and BART parking, did not provide sufficient capacity for the projected traffic and patronage at this station.

S104. WAYNE, ALAN (2/15/95)

- S104.1. Mr. Wayne's oral testimony is the same as his written testimony, which was prepared on behalf of the Air Transportation Association. Please refer to Responses 30.1 through 30.50.

S105. WHEELER, JIM (2/18/95)

- S105.1. Alternative VI is the most preposterous transit proposal I have ever seen.

**Response.** The commentor's opposition to Alternative VI is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards when choosing the LPA in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

S105.2. Why BART, when we already have a rail system that can be upgraded to a Peninsula rapid transit system for much less money than the BART extension? This report must be rewritten with a modernized CalTrain rapid transit system considered.

**Response.** Please refer to Response S19.7 for a discussion on high speed rail on the Peninsula.

**S106. WILLIAMS, MATT (2/15/95)**

S106.1. If BART were operating both passenger railroads in San Mateo County, would it make sense to bring the third rail, wide gauge railroad down from Colma at a cost of 1.2 billion, given that the standard gauge railroad is already right near the airport and can be brought to the terminal and United Airlines' maintenance base for under 400 million dollars and that railroad already runs to all cities along Highway 101....Let us go to the federal government and let them know that the region has found another way to bring rail into the airport -- that's CalTrain....Make a deal with the Joint Powers Board. See if it's possible for BART and the JPB to be partners in San Mateo County....Bring San Mateo County to BART by operating Fast Track passenger service on the present CalTrain railroad.

**Response.** BART and CalTrain serve different markets. They are complementary, not competing, systems. MTC predicts that all of the BART alternatives would result in increases in CalTrain ridership. CalTrain would ridership increase from about 38,000 to 47,000 total daily boardings in the year 2010 under all BART build alternatives. CalTrain ridership would increase under all build alternatives addressed in the DEIR/SDEIS due to projected growth in the region, physical improvements, service improvements and the provision of a CalTrain/BART transfer.

The need for the BART Extension Project is described in Section 1.3, pages 1-6 through 1-8 for the DEIR/Technical Appendix. As described in Section 1.3, a BART-San Francisco Airport Extension is being advanced primarily to recognize the regional consensus and carry out the public mandate for the project, to respond to a regional need to alleviate highway congestion, to accommodate airport expansion, and to improve air quality, as further described below.

*Public Mandate.* The BART-San Francisco Airport Extension is supported by a strong regional consensus, as demonstrated by MTC Resolution 1876 and San Mateo and San Francisco County ballot measures. In November 1985, San Mateo County voters passed Measure A, which authorized SamTrans to allocate funds for the BART Colma Extension, by a favorable vote of 73 percent. In November 1987, San Mateo County voters approved Measure K, which provides for the use of SamTrans funds for a BART extension beyond Colma to the vicinity of San Francisco Airport, by a favorable vote of 61 percent.

In 1988, MTC approved Resolution No. 1876, which established the New Rail Starts and Extension Program for the nine-county San Francisco Bay Area. On April 6, 1989, in a periodic update to Resolution No. 1876, MTC identified that the BART-San Francisco Airport Extension was the region's first priority for federal New Starts funding.

In 1992, San Mateo County showed support for a BART Extension to San Francisco Airport by passing Measure B, an advisory vote by 75 percent. In June 1994, San Francisco voters overwhelmingly approved Proposition I, which directed San Francisco officials to take "all actions necessary to extend BART service into the Airport terminal area," by 65 percent.

*Highway Congestion.* Traffic on peninsula freeways near SFIA and into/out of San Francisco regularly exceeds highway capacities, particularly during peak commute periods, resulting in significant periods of stop-and-go movement. Opportunities to increase highway capacity along the freeways by widening are constrained by expensive right-of-way requirements and significant environmental and community obstacles.

MTC regional travel forecasts indicate that traffic flow from San Mateo and Santa Clara Counties to downtown San Francisco will increase 16 percent between 1987 and 2010, and traffic to and from SFIA will increase 52 percent during the same period. The number of daily work trips is projected to be 201,500 by 2010, making the Peninsula second only to the Bay Bridge corridor in the region's transit markets.

The BART-San Francisco Airport Extension will result in 47,600 new weekday BART trips over No Build conditions in 2010, thus reducing highway demand overall. Weekday BART trips in San Mateo County would be approximately 96,400 in 2010.

*Accommodate Airport Expansion.* SFIA is the single largest traffic generator on peninsula freeways, and currently over 65 percent of air passengers and employees drive to the airport. The airport's annual air traffic is expected to increase 70 percent by 2006, from 30 million to 51 million air passengers, necessitating its \$2.5 billion expansion program. The expansion of SFIA will generate an additional 65,000 to 70,000 cars per day. Effective transit alternatives are, therefore, an imperative. Without a BART connection, the majority of these passengers, airport employees, and visitors would be forced onto congested peninsula freeways for access to the airport.

*Improve Air Quality.* The Bay Area has been redesignated as an attainment area for ozone under federal standards. The extension of BART has been named by the Bay Area Air Quality Management District (BAAQMD) as one of the region's key transportation-related measures aimed at achieving and maintaining improved air quality standards.

Please refer to Response 13.4 for a discussion of the CalBART proposal, which proposes bringing an upgraded CalTrain to the airport terminal and United Airlines Maintenance Base.

#### S107. WOLFE, VAUGHN (PUBLIC HEARINGS 2/15/95, 2/18/95)

- S107.1. The BART proposal is purely to eliminate CalTrain in any way, shape, or form.

**Response.** The commentor's opposition to the BART extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process). The BART extension will not preclude future improvements to CalTrain and will not endanger existing CalTrain service.

- S107.2. The modeling numbers the MTC did were inadequate and didn't fit reality, so they made an estimate. If estimates were valid, then the FTA wouldn't require modeling, so that essentially makes most of the ridership a bunch of junk, and they even say....There is no consideration whatsoever for productions of ridership up until 2010 for a downtown extension.

**Response.** The transit patronage numbers included in the DEIR/SDEIS are based on MTC's travel demand model. Any revisions to MTC's patronage forecasts were based on further modeling to reflect localized conditions, such as within the SFIA, and are documented in the Transportation Technical Report to the DEIR/SDEIS. Please refer to Response 11.6 for a discussion of the impacts of the CalTrain Downtown Extension.

- S107.3. In the LPA in the base case, they put BART...in between CalTrain and the people mover...If BART would stay out of the way of CalTrain, you could have a direct across-platform transfer and it would be much faster for CalTrain to transfer and get downtown.

**Response.** Please refer to Response 244.5 concerning the placement of the BART tracks in relation to the CalTrain tracks and the potential impact on connections with the ALRS.

- S107.4. If you really sat down and looked at this from a transportation point of view, there is no sense whatsoever to extend BART from Colma to SFO for anything more than a hundred million dollars.

**Response.** The commentor's opposition to the BART extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards during the LPA selection process in November 1995. Both boards selected the Alternative VI Aerial Design Option as the LPA (see Response 2.7 for a discussion of the LPA selection process).

- S107.5. The \$200 million left that San Mateo is going to be paying into it could easily cover the electrification of CalTrain from San Francisco to Gilroy, and the operating costs in the first two years of BART would easily cover the refurbishment of the Dumbarton Bridge and connect with service off to Stockton...

**Response.** The estimated cost of electrification of CalTrain for its route from Gilroy to San Francisco is \$293 million. The TCI funds committed to the BART project are exclusively available to this project, and cannot be transferred to another project.

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### 3.7 ADDITIONAL COMMENTORS

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The following letters were received from individuals and businesses after the close of the public review period. Late letters from public agencies have also been included and are addressed earlier in this chapter. BART and SamTrans have prepared responses for these comments even though they were received late.

#### A1. CAPUTO, TITO

- A1.1. All the proposals presented are not acceptable to the residents of San Bruno, Millbrae, and Burlingame. We do not want BART in our neighborhood.

**Response.** The commentor's opposition to all of the alternatives is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards and the Metropolitan Transportation Commission (MTC) when choosing the Locally Preferred Alternative (LPA). In addition, Section 1.3 of the DEIR/Technical Appendix provides justification for the need and purpose of the proposed project. Background studies demonstrating the need for a rail project south of Colma are discussed in Response 79.18.

#### A2. FAZIO, TONY

- A2.1. I support BART into the airport.

**Response.** The commentor's support for the BART-San Francisco Airport Extension is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards and the Metropolitan Transportation Commission (MTC) when choosing the Locally Preferred Alternative (LPA).

A3. NACAMULLI, STEVEN AND FLORENCE

- A3.1. Give us a fully covered, underground subway that will allow your patrons to take full advantage of BART service without disturbing or destroying the very real religious and historic treasure that the Colma Cemeteries represent.

**Response.** All BART build alternatives through the Colma cemeteries, except for the Base Case Alternative, are proposed to be in subway. The Base Case Alternative includes a retained cut design that would be below grade but would not be covered. The DEIR/Technical Appendix on pages 3.4-23 and 3.4-24, indicates that the Base Case Alternative would have a significant adverse effect on the cemeteries.

A4. NESBITT, BRYCE

- A4.1 I'm concerned that some of the proposals, most notably alternative VI, seem designed to ignore the south bay....I offer several very simple principles I feel should guide any decision on transit configuration: Access to all airlines and gates should be roughly equivalent....While effort may be needed to enhance the airport's design for the people mover, the concept is sound, sufficient and necessary....Like it or not, CalTrain will be the system to the south for years to come. CalTrain passengers must not be required to make an additional transfer....The current solution should not compromise future south bay BART service. Multiple stops and tight curves (like those in downtown Berkeley) limit the speed of trains....At all times planning should consider minimizing the sum over all origins and destinations....I can't imagine a workable system that does not include an intermodal BART/CalTrain/ALRS/Bus and possible Kiss 'N Fly hub.

**Response.** The commentor has expressed an important design criterion that BART has followed as much as possible in its formulation of alternatives; namely, the connectivity of various transit modes, including BART, CalTrain, SamTrans, and the ALRS. Please refer to Response 14.7 for a discussion of how the various alternatives meet this criterion (specifically, see Evaluation Relative to Goal 7[a]); Responses 49.1 and 66.111 regarding transfers among various modes; and Response 79.18 for an overall history of the project corridor studies and the need this service.

A5. WINDFELDT, EDWARD W.

- A5.1. We are not in favor of BART going to SFO if it has to go through residential neighborhoods to do so. It would make a lot more sense to route BART south along 101, through an almost exclusively industrial area of the peninsula and San Francisco.

**Response.** The commentor's opposition to the BART extension into the SFIA if it goes through residential neighborhoods is noted. Public input regarding the merits of the various alternatives was considered by the BART and SamTrans boards and the Metropolitan Transportation Commission (MTC) when choosing the Locally Preferred Alternative (LPA). The specific corridor and the refinement of the particular alignment has been the subject of numerous studies. Response 14.7 identifies the criterion used to select and evaluate the alternatives, and Responses 54.17 and 79.18 provide a description of this process.

- A5.2. We do not want BART to go through our neighborhood [Sunshine Gardens in South San Francisco] but if we have no choice in the matter, we ask that it at least travels underground to minimize the noise. In Daly City, Concord and Walnut Creek, the noise from BART is terrible and can be heard for a very long way. South San Francisco is already very polluted with noise and needs no more.

**Response.** The commentor's opposition to the BART alignment traversing the Sunshine Gardens neighborhood and support for an underground configuration through South San Francisco is noted. Public input regarding the merits of the various alternatives was considered by the BART and

SamTrans boards and the MTC when choosing the LPA. All of the BART build alternatives, except the Base Case Alternative, propose a subway through the Sunshine Gardens neighborhood of South San Francisco. The Base Case Alternative includes a retained cut configuration through this segment. The noise impacts of this alignment can be found in the DEIR/Technical Appendix beginning on page 3.9-36.

A5.3. The Hickey Station is set up for 1300 parking places in an area that already has a parking problem because of the high school. We have been told that a residential parking program will have to be instituted in the Sunshine Gardens area. If it is known before construction that there will be a parking problem, why not address the problem now and find a way to prevent it?

**Response.** BART parking designs provide sufficient space to meet the projected demand. Accordingly, spillover parking should not occur; however, it is conceivable that BART patrons may elect to park outside the station in the adjacent neighborhoods. It is because of this possibility that BART has proposed, as a mitigation measure, monitoring of spillover parking impacts. A residential parking program would be implemented only if the problem were severe enough to warrant such an effort. This is explained in greater detail in the DEIR/Technical Appendix on page 3.1-67 and in Response 14.25 of this volume of the FEIR/FEIS.



## Chapter 4

# Revisions to the DEIR/SDEIS

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This chapter of Volume II contains revisions to the DEIR/Technical Appendix as a result of responses to comments on the DEIR/SDEIS. The revisions are presented in a tabular format and organized as follows:

**Column 1:** **Page No.** – identifies the page number in the DEIR/Technical Appendix where the revision occurs.

**Column 2:** **Response No.** – identifies the response number in Chapter 3 of this volume that prompted the revision.

**Column 3:** **Revised Text** – identifies how the DEIR/Technical Appendix is modified.

Page No.	Response No.	Revised Text
1-5	3.14	Delete the second bullet at the top of the page.
1-10	6.33	Revise Table 1-3, Department of Transportation line, under State:  Possible encroachment of federal and state funded highways <u>requiring the use of a Caltrans Encroachment Permit.</u>
1-11	24.93	Revise the "type of review approval" for FAA:  <u>Possible approvals Submission and approval of revised SFIA airport layout plan</u> for those alternatives into SFIA.
1-12	24.94	Revise Table 1-3, under Local Agencies:  Coordination, planning, and construction of Airport Light Rail System connection to BART; possible funding source; approval of BART construction, facilities and operations on airport property.
2-8	72.11	Revise line one:  The base fare is \$0.85 \$1.00; express service to San Francisco is between \$1.50 and up to \$2.50 (February 1996 fare increase), comparable to CalTrain fares.
2-13	24.95	Revise paragraph four, sentence four:  <del>As part of the SFIA Master Plan, an Airport Light Rail System (ALRS), to</del> would be constructed and operated by the SFIA, and would connect the BART/CalTrain station with the SFIA Terminals and employment sites.

Page No.	Response No.	Revised Text
2-17	72.19	<p>Revise Figure 2.2-6, paragraph two, sentence one:</p> <p>Key ancillary facilities include car washes, traction power stations, ventilation buildings, and tailtracks, and are illustrated in Figures 2.2-7 and 2.2-8.</p>
2-23	72.33	Revise Table 2.2-1 as shown on the following page.
2-26	72.34	<p>Revise paragraph five, sentence one:</p> <p>As was described in the AA/DEIS/DEIR, the existing San Bruno CalTrain Station would be relocated to a new site under I-380 with approximately 170 parking spaces (see Figure 2.2-10). The relocated CalTrain station facility will be shown on the design appendix drawings in the final EIR/EIS.</p>
2-30	24.1	<p>Replace paragraph two, sentence four:</p> <p>However, the portion of the ALRS that crosses to the west over Highway 101 was not previously studied, and this segment serving the CalTrain station is analyzed in the DEIR/SDEIS <u>analyzed in the SFIA Master Plan FEIR</u>.</p>
2-33	19.25.	Revise first full sentence:
		<p>The LPA resolutions adopted by BART, SamTrans and MTC recommended that in the Spring of 1992 recommend that if financing cannot be secured for the LPA, that the Base Case or another lower cost option for which funding is secured becomes the new LPA. This alternative becomes the LPA if local funding to build the proposed project cannot be secured.</p>
2-66	72.45	Revise paragraph at top of page, last sentence:
		<p><del>South</del> Approximately 150 feet north of the existing San Bruno CalTrain Station platform, a subway relief tracks would branch off of the mainline for storage of approximately 20 28 cars.</p>
2-69	244.7	Revise paragraph two, sentence two:
		<p>BART passengers could access the Airport International Terminal ticketing area by elevators, escalators, or by and walking (see Figures 2.2-34a and 2.2-34b).</p>
2-74	72.51	Revise paragraph seven, sentences one and two:
		<p>A Subway relief tracks for storage of 20 up to 28 vehicles would extend south of the existing from approximately 150 feet north of the San Bruno CalTrain Station, platform within the CalTrain right-of-way to approximately Cupid Row Florida Avenue. A ventilation and subway access structure would be located across from Cupid Row at the existing San Bruno CalTrain Station.</p>

**Table 2.2-1**  
**BART Service Summary for the**  
**BART-San Francisco Airport Extension**

Period	Number of Routes	Minimum Headway (Minutes)	Average Headway (Minutes)	Average Number of Trains/Period	Average Cars Per Train	Number of Cars	Capacities	
							Seated	With Standees <sup>1</sup>
<b>WEEKDAY SERVICE SUMMARY</b>								
Startup								
4A.M.-6A.M.	1	20	24	5	9.3	47	3,384	4,399
A.M. Peak								
6A.M.-9:30A.M.	2	1.9	4.5	47	9.3	439	31,608	41,090
Base								
9:30A.M.-3P.M.	2	7.5	7.5	44	5.5	242	17,424	24,394 22,651
P.M. Peak								
3P.M.-7P.M.	2	1.9	4.5	53	9.3	495	35,640	46,332
Night								
7P.M.-12A.M.	1	20	20	15	7.6	114	8,208	11,491 10,670
TOTAL	--	--	--	164	8.2	1,137 1,337	96,264	127,706 125,143
<b>SATURDAY SERVICE SUMMARY</b>								
Startup/Day								
6A.M.-7P.M.	2	10	1078	4.8	375	27,000	37,800	35,100
Night								
7P.M.-12A.M.	1	20	2015	4.1	62	4,464	6,250	5,803
TOTAL	--	--	--	93	4.7	437	31,464	44,050 40,903
<b>SUNDAY SERVICE SUMMARY</b>								
Day								
8A.M.-7P.M.	1	20	2033	7.5	248	17,856	24,998	23,212
Night								
7P.M.-12A.M.	1	20	2015	3.6	54	3,888	5,443	5,054
TOTAL	--	--	--	48	6.0 6.3	302	21,744	30,441 28,267

Source: BART, 1993.

1) Assumes a 1.3 load factor.

Page No.	Response No.	Revised Text
2-76	72.51	<p>Revise paragraph two, sentence four:</p> <p>The tunnel construction would extend from Euclid Avenue <u>under I-380</u> to north of Sylvan Avenue through downtown San Bruno.</p>
2-76	72.72	<p>Replace paragraph three, last sentence:</p> <p>This design option would result in <u>less minimal</u> disruption to San Bruno businesses during construction <u>than the cut-and-cover method</u>.</p>
2-77	72.335	<p>Revise paragraph two, third sentence:</p> <p>As indicated, the operating and maintenance costs for the entire BART system range from \$275.8 million (in 1993 dollars) \$301.4 million (in 1996 dollars) for Design Option V-B to \$278.7 \$314.4 million for the proposed project, to about \$282.9 \$309.1 million for Alternative VI.</p>
2-79	72.66	<p>Revise Table 2.3-2, table title:</p> <p style="text-align: center;"><b>Table 2.3-2;</b> <b>Estimated Operating and Maintenance Costs in 2010</b> <b>Millions of 1993 1996 Dollars</b></p>
2-81	72.70	<p>Revise Table 2.4-1, Alternative VI:</p> <p>Alternative VI</p> <ul style="list-style-type: none"> <li>• Hickey - 1,337</li> <li>• Tanforan - 3,300 <u>1000</u></li> <li>• Airport International - 0</li> <li>• Millbrae Ave. - 3,000</li> </ul> <p>Total: 7,337 <u>5,337</u></p>
2-81	72.71	<p>Revise Table 2.4-1, first column, seventh row:</p> <p>Capital Costs (BART only-thousands 1994 1996 \$)</p>
2-97	107.36	<p>Revise Table 2.4-2, Air Quality, first bullet:</p> <ul style="list-style-type: none"> <li>• Reductions in emissions from 1993 No Build by 1998 (000 <u>10</u><sup>3</sup> tons/yr)</li> </ul>
2-106	107.51	<p>Revise Table 2.5-1, third bullet:</p> <ul style="list-style-type: none"> <li>• Sustains 2-minute BART or other fixed rail transit headways during peak.</li> </ul>

Page No.	Response No.	Revised Text
2-108	107.58	<p>Revise Table 2.5-1, first bullet and paragraph one, sentence one:</p> <ul style="list-style-type: none"> <li>• BART operations and failure      Subjective ranking of BART operating and management failure management characteristics by BART's Operations Liaison staff. A relative ranking of excellent/fair/poor was used with explanatory text as appropriate.</li> </ul>
3.1-2	24.9	<p>Revise paragraph three, sentence one:</p> <p>The SFIA is the seventh <u>largest busiest</u> airport in the world, serving 29.9 million annual airline passengers in 1990.</p>
3.1-2	24.10	<p>Revise paragraph four, sentence one:</p> <p>Growth projections included in the <i>San Francisco International Airport Final Draft Master Plan</i> (SFIA Master Plan) show that annual airline passengers are predicted to increase from 29.9 million to 51.3 million <u>between 1990 by 2006</u>.</p>
3.1-2	24.10	<p>Revise paragraph four, sentence two:</p> <p>Associated with this increase will be an employer increase, from 33,400 to 42,400 <u>by 2006</u>.</p>
3.1-3	24.12	<p>Revise paragraph one, sentences three and four:</p> <p>The SFIA has a total of <u>22,889 25,559</u> parking spaces; <u>9,381 10,345</u> for short term and long term airline passengers; <u>2,280</u> for rental cars, courtyard and taxi staging; and <u>13,508 12,934</u> for employees. An additional <u>3,550 5,170</u> long-term parking spaces are provided by privately operated facilities that are not on SFIA property.</p>
3.1-4	66.239	Revise Table 3.1-2 as shown on the following page.
3.1-4	72.77	<p>Revise carryover paragraph, first complete sentence:</p> <p><u>SamTrans Route 2X offers two one trips from the Pacifica area to the United Airlines Maintenance Base in the morning and one trip from the United Airlines Maintenance Base to Pacifica in the afternoon.</u></p>
3.1-5	29.9	<p>Revise paragraph three, sentence eight:</p> <p>An extension of BART 1.5 miles southward from the Daly City Station to a new station <u>in immediately north of</u> the Town of Colma is currently being built and is scheduled for revenue service by mid-1995.</p>
3.1-17	72.85	<p>Add the following footnote to Table 3.1-6:</p> <p>3) <u>The travel volumes shown are only from the five counties most affected by the project alternatives. These counties are San Francisco, Alameda, Contra Costa, Santa Clara, and San Mateo.</u></p>

**Table 3.1-2**  
**SFIA Airline Passenger and Employee Access Modes**  
**Percent Distribution**

Access Mode	Airline Passengers		Employees	
Rental Car	49.8	<u>19.6%</u>		0.0%
Private Car	45.6	<u>46.1</u>		68.0
Dropped Off		included in above		1.7
Carpool	0.0		11.8	<u>13.0</u>
Vanpool	0.0		3.9	<u>7.0</u>
Scheduled Transit	9.8	<u>3.3</u>	12.8	<u>3.6</u>
On-Call Transit*	18.7	<u>23.0</u>	0.0	<u>1.5</u>
Other	6.1			1.8
Taxi	6.1			<u>0.0</u>
Charter Bus	1.2			<u>5.0</u>
Walk/Bicycle/Other	0.7			<u>1.9</u>
<b>TOTAL</b>	<b>100.0%</b>		<b>100.0%</b>	

Sources: MTC, "Air Passenger Survey 1990," September 1991

SFIA, "1991 Airport Employee Work Travel Survey," July 1992

\* Includes on-call van service, "Airporter" express buses, hotel/motel courtesy vans, and luxury limousines.

Air-freight-related truck trips are not included as an air passenger or employee mode of access to work.

San Mateo County Transit district, "SFO Airport Employee/Employer Survey," September 1983.

Page No.	Response No.	Revised Text
3.1-19	72.91	Revise Table 3.1-8, footnote 3:  3) Bus includes shuttle buses as well as buses operated by SamTrans and Muni.
3.1-25	72.103	Revise Table 3.1-12, footnote 2:  (2) Total transit boardings divided by regional transit person trips from Table 3.1-9 3.1-14 minus 1 which represents the boarding on the first transit system. The 2,127,700 transit boardings from Table 3.1-12 is divided by the 1,294,100 linked transit trips in the year 2010 to obtain 1.644, then minus 1 yields 0.644.
3.1-27	72.95	Revise paragraph two, sentences one and two:  Appendix Tables AB-1, AB-2 and AB-3 provide greater detail of changes in transit ridership under the proposed project, focusing on key geographic areas within the region that would be served by the BART-San Francisco Airport Extension. Table AB-1 shows transit ridership to the SFIA, Table AB-2, transit usage to northern San Mateo County, and Table AB-3, transit ridership from the Peninsula to downtown San Francisco.
3.1-29	29.9	Revise paragraph three under Impact 8, sentence three:  Under the proposed project, passengers from the Peninsula would be able to board at BART stations in northern and central San Mateo County instead of traveling to the Colma or Daly City stations.
3.1-31	29.9	Revise paragraph one under Impact 1, sentence two:  For 1998 and 2010, BART will extend about 1-1/2 miles south to a new station in immediately north of Colma, providing an increase in geographical coverage.
3.1-31	24.19	Revise paragraph one under Impact 1, sentence four:  There is no ALRS service to west of Highway 101 under the No Build Alternative.
3.1-40	72.103	Revise Table 3.1-26, footnote 2:  (2) Total transit boardings divided by regional transit person trips from Table 3.1-33 3.1-27 minus 1 which represents the boarding on the first transit system. The 2,105,600 transit boardings from Table 3.1-26 is divided by the 1,281,500 linked transit trips in the year 2010 to obtain 1.643, then minus 1 yields 0.643.
3.1-48	72.103	Revise Table 3.1-32, footnote 2:  (2) Total transit boardings divided by regional transit person trips from Table 3.1-45 3.1-34 minus 1 which represents the boarding on the first transit system. The 2,127,800 transit boardings from Table 3.1-32 is

Page No.	Response No.	Revised Text
		<u>divided by the 1,295,300 linked transit trips in the year 2010 to obtain 1.643, then minus 1 yields 0.643.</u>
3.1-57	72.103	Revise Table 3.1-40, footnote 2:  (2) Total transit boardings divided by regional transit person trips from Table 3.1-57 3.1-42 minus 1 which represents the boarding on the first transit system. The 2,127,700 transit boardings from Table 3.1-40 is divided by the 1,295,400 linked transit trips in the year 2010 to obtain 1.643, then minus 1 yields 0.643.
3.1-58	72.96	Revise Impact 8, paragraph two, last sentence:  Details are shown in Appendix Table AB-20.
3.1-62	72.96	Revise Table 3.1-45, footnote:  Source: See Appendix Table AB-20.
3.1-66	72.103	Revise Table 3.1-48, footnote 2:  (2) Total transit boardings divided by regional transit person trips from Table 3.1-69 3.1-50 minus 1 which represents the boarding on the first transit system. The 2,127,900 transit boardings from Table 3.1-48 is divided by the 1,296,500 linked transit trips in the year 2010 to obtain 1.641, then minus 1 yields 0.641.
3.1-67	72.96	Revise Impact 7, paragraph one, sentence four:  A significant shift to rail transit for SFIA users would also occur, as shown in Table 3.1-51 and detailed in Appendix B (Tables AB-21 through AB-23).
3.1-72	72.103	Revise Table 3.1-54, footnote 2:  (2) Total transit boardings divided by regional transit person trips from Table 3.1-81 3.1-56 minus 1 which represents the boarding on the first transit system. The 2,128,100 transit boardings from Table 3.1-54 is divided by the 1,293,700 linked transit trips in the year 2010 to obtain 1.645, then minus 1 yields 0.645.
3.1-73	72.96	Revise Impact 2, paragraph one, sentence three:  (Details regarding transit ridership are provided in Appendix Tables AB-25 through AB-27.)
3.1-73	72.96	Revise Impact 3, paragraph one, last sentence:  Ridership at BART stations under this option is . . . and detailed in Appendix AB-28.

Page No.	Response No.	Revised Text	Projected Operations	Change from No Build
3.1-79	72.98	Revise Table 3.1-62:		
		<b>CalTrain</b>		
		Peak Vehicle Requirements	<u>21</u>	<u>7</u>
		Locomotives	<u>24</u>	<u>22</u>
		Passenger Cars	<u>21</u>	<u>7</u>
			<u>24</u>	<u>22</u>
3.1-80	72.97	Revise paragraph one, sentence two:		
		Annual vehicle miles would also increase by about 4.1 <u>5.2</u> million.		
3.1-80	72.100	Revise Impact 3, paragraph one, sentence three:		
		In most cases ( <u>45</u> <u>44</u> of 49 OD pairs), travel times would improve or remain unchanged.		
3.1-81	66.178	Replace Table 3.1-63, with the following page.		
3.1-82	72.103	Revise Table 3.1-64, footnote 2:		
		(2) Total transit boardings divided by regional transit person trips from Table 3.1-105 <u>3.1-66 minus 1</u> which represents the boarding on the first transit system. The 2,127,200 transit boardings from Table 3.1-64 is divided by the 1,295,300 linked transit trips in the year 2010 to obtain <u>1.642</u> , then minus 1 yields <u>0.642</u> .		
3.1-83	S91.3	Revise the column headed 1993 Base Year of Table 3.1-65:		
		Weekday Transfers between Operators	1993 Base Year	
		BART-CalTrain	<u>19,900</u> <u>19,700</u>	
		BART-ALRS (excludes walkers)	<u>5,100</u> <u>1,500</u>	
		CalTrain-ALRS <sup>(1)</sup>	N/A	
3.1-87	72.109	The source for Table 3.1-69, Alternative VI BART Station Daily Volumes, is revised as follows:		
		Source: See Appendix A <u>B-40</u>		

**Table 3.1-63**  
**Alternative VI - Millbrae Avenue to Airport International Terminal**  
**Transit Travel Times (Minutes)(1)**  
**A.M. Peak Period (2010)**

Northbound		Destinations				
		S.F. State	S.F. Civic Center	Union Square	Maritime Plaza	Oakland Center
Hilldale CalTrain	Travel Time	49	54	52	55	69
	Change From No-Build	-25	-5	2	2	0
Airport Intermodal Station Site	Travel Time	32	37	37	41	52
	Change From No-Build	-15	-8	-2	-1	-5
SFIA Terminals	Travel Time	37	42	43	46	57
	Change From No-Build	-14	-1	-5	-6	-6
So. San Francisco CalTrain	Travel Time	43	46	37	40	55
	Change From No-Build	-12	0	0	0	0
Hickey BART	Travel Time	24	29	30	32	46
	Change From No-Build	-6	-19	-8	-8	-8
Southbound		Destinations				
		Kaiser Medical	Tanforan Shopping	San Bruno City Hall	Hillsdale Shopping	SFIA Terminals
12th Street BART (Oakland)	Travel Time	41	47	58	86	57
	Change From No-Build	-24	-27	-15	0	-4
Montgomery St. BART	Travel Time	32	34	43	71	42
	Change From No-Build	-18	-25	-15	-2	-2
Civic Center BART	Travel Time	28	30	39	67	37
	Change From No-Build	-18	-25	-15	-4	0
Daly City BART	Travel Time	13	15	24	52	23
	Change From No-Build	-11	-18	-9	-19	-27
						UAL (SFIA)

Source: Parsons Brinckerhoff, January 1994

(1) Travel times include walk or transit access time to final destination. It does not include origin station access time which varies depending on location of travellers residence. Travel times assume utilization of the fastest transit mode (i.e., bus, BART, or CalTrain). Times shown are unweighted.

Page No.	Response No.	Revised Text
3.1-91	72.113	<p>Revise Table 3.1-70 to reflect the deletion of the following intersections:</p> <p><del>137. Huntington &amp; Herman</del>  <del>138. Huntington &amp; South PNR Entry</del>  <del>139. Huntington &amp; San Mateo Access</del>  <del>140. San Mateo &amp; San Mateo Access</del>  <del>145. Huntington (new) &amp; Sneath</del></p>
3.1-92	72.112	<p>Revise Table 3.1-70, Intersection 66:</p> <p>66. Huntington &amp; <del>Sneath</del> San Felipe</p>
3.1-97	72.114	Delete paragraph three, last sentence.
3.1-98	72.115	Delete the last five items on the bulleted list.
3.1-103	72.122	<p>Revise paragraph four, sentence five:</p> <p>Results of analyzed intersections are included in Appendix Table <u>B-1 C-1</u>.</p>
3.1-105	17.21	<p>Revise bulleted paragraph “San Mateo/Huntington”:</p> <ul style="list-style-type: none"> <li>• <b>San Mateo/Huntington (60).</b> The unsignalized intersection at this location currently operates as LOS D in the A.M. and P.M. peak hours. Under Alternatives IV and V and Design Options V-A and V-B, LOS would deteriorate to E or F during the P.M. hour. <u>During the A.M. peak hour, LOS would degrade to E under Alternative VI.</u></li> </ul>
3.1-105	72.122	<p>Revise fourth bullet:</p> <ul style="list-style-type: none"> <li>• Huntington/Tanforan Driveway North <u>(162)</u>.</li> </ul>
3.1-109	72.10, 72.122	<p>Revise third bullet:</p> <ul style="list-style-type: none"> <li>• Huntington/Tanforan Driveway <del>South</del> North <u>(162)</u>.</li> </ul>
3.1-111	17.21	<p>Revise bulleted paragraph “San Mateo/Huntington”:</p> <ul style="list-style-type: none"> <li>• <b>San Mateo/Huntington (60).</b> This unsignalized intersection is forecast to operate as LOS C during the A.M. peak hour and at LOS D during the P.M. peak hour under the 1998 No Build scenario. During the P.M. peak hour, LOS would degrade to E under Alternatives IV and V and Design Options V-A and V-B. <u>During the A.M. peak hours, LOS would degrade to E under Alternative VI.</u></li> </ul>
3.1-115	72.122	<p>Revise second bullet:</p> <ul style="list-style-type: none"> <li>• Huntington/Tanforan Driveway North <u>(162)</u>.</li> </ul>

Page No.	Response No.	Revised Text
3.1-186	14.20	<p>Revise the first sentence in the paragraph following the last bullet:</p> <p><u>Each of the city's plans calls for a bikeway along the railroad right-of-way. The General Plans of South San Francisco, San Bruno, and Millbrae indicate a planned bikeway to run the length of the project corridor along the railroad right-of-way.</u></p>
3.1-192	72.166	<p>Revise first full sentence:</p> <p>Formal crossing includes Forest Lane, Herman Street, Montgomery Avenue, San Mateo Avenue, Walnut Street, San Bruno Avenue, Pine Street and Angus Avenue.</p>
3.2-14	19.60	<p>Revise paragraph three:</p> <p>Much of the housing and industrial use in the city was developed between the 1940s and 1960s, and South San Francisco is currently nearly fully developed (built out). A major exception to this trend is the Terrabay development (719 residential units) <u>currently under construction</u> to be constructed north of Hillside Boulevard. In recent years, there has been substantial redevelopment and intensification of use in the Gateway area east of Highway 101, with office buildings, hotels, and biotech development replacing industrial uses. <u>In addition, the proposed development of a 60-acre site at Shearwater, located on the north side of Oyster Point Boulevard, would include a mix of offices, hotel, and residential development. There are several vacant or underutilized sites in the northern section of the City where El Camino Real enters from Colma. Notable vacant sites in this area include the 60-acre Shearwater commercial property and the 30-acre Koll property along the southern portion of Sierra Point. There are also approximately 60 vacant or underutilized acres in the northwestern section of the city where El Camino Real enters from Colma in close proximity to the proposed BART alignment.</u></p>
3.2-22	107.123	<p>Add at the end of the first full paragraph:</p> <p><u>This area is known as the Central Business District, or downtown San Bruno.</u></p>
3.2-25	24.34	<p>Revise paragraph two, sentence three:</p> <p><u>In recognition of the impact of SFIA operations on adjacent communities, the state required the establishment of an Airport Land Use Commissions (ALUC) in counties such as San Mateo to develop land use plans around airports.</u></p>
3.2-25	24.35	<p>Revise paragraph three, sentence four:</p> <p>This area contains habitats for sensitive wildlife species and is not <u>addressed by the SFIA Master Plan pending a habitat conservation study and specific permit(s) from the California Department of Fish and Game and U.S. Department of Fish and Wildlife analyzed for development under the Master Plan EIR.</u></p>

Page No.	Response No.	Revised Text
3.2-25	24.36	<p>Revise paragraph four, sentence three:</p> <p>The near-term plan for 1990-1996, among other projects includes development of the Airport Light Rail System, the Ground Transportation Center and the International Terminal.</p>
3.2-25	24.36	<p>Revise paragraph four, sentence five:</p> <p>The long-term plan, covering improvements beyond 1996, includes extension of the Airport Light Rail Station to connect to a transit station on the property west of Highway 101, as well as expanded parking among other projects, cargo and commercial facilities, parking lot expansion, as well as a potential future extension of the Airport Light Rail System to mass transit.</p>
3.2-31	14.45	<p>Revise paragraph three, sentence one:</p> <p>The Burlingame General Plan was approved in 1968 and last amended in the mid-80s adopted on October 20, 1969 by Resolution 87-69 and last amended with the Housing Element in 1994.</p>
3.2-32	14.46	<p>Add paragraph after the first carryover paragraph under Table 3.2-8:</p> <p>In implementing the recently adopted 1990-97 Housing Element, the City of Burlingame created an overlay zone allowing high density residential development along the west side of California Drive from the back of single family lots facing Dufferin to the Millbrae/Burlingame city line at Magnolia.</p>
3.2-37	17.52	<p>Replace paragraph five, sentence three:</p> <p>Although shopping center expansion is limited at present by high levels of noise from airplanes at SFIA, restrictions on height due to safety zones for planes taking off and landing at SFIA, and changing trends in retail development, it is possible that future retail expansion would be limited by loss of future parking supply.</p>
3.2-40	72.182	<p>Revise Impact 3, paragraph one, sentence two:</p> <p>There are few opportunities for intensification or redevelopment within the city jurisdiction, especially since there would be no access from the community to the west of the station.</p>
3.2-47	24.32	<p>Add new impact before "Millbrae" heading and renumber subsequent impacts:</p> <p><b>San Francisco International Airport</b></p> <p>10. <i>Existing parking would be displaced by the Airport Long-Term Parking Station. (S)</i></p> <p>MITIGATION MEASURES. The following measure would reduce the impact to an insignificant level.</p>

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		<p>10.1 <i>Parking Space Replacement.</i> BART will provide one-to-one replacement parking on SFIA property for any lost spaces due to the Airport Long-Term Parking Station.</p>
3.2-63	72.190	<p>Revise last paragraph, last three sentences:</p> <p>Compliance with all of the state and federal laws that apply to displacement of parks would partially mitigate this impact. If, however, the park cannot be replaced, the impact would remain significant and unavoidable. Relocating the parks into a new area of the city would have its own impacts that cannot be quantified at this time.</p>
3.2-66	19.65	<p>Revise Impact 3:</p> <p>3. <i>Land acquisition would be necessary for the proposed Oak Avenue extension, but no displacement would occur including some City and County San Francisco Water Department land which is currently leased to an auto dealership. A small portion of the auto storage lot would be displaced. (1)</i></p>
3.3-6	29.15	<p>Revise paragraph four:</p> <p>The cemeteries along El Camino Real are the only sensitive receptors in Colma within the project corridor. There are also scattered no residential areas or parks in Colma along Mission Road and El Camino Real near the project corridor.</p>
3.3-6	29.16	<p>Revise paragraph six, sentence two:</p> <p>Along the west side within the same stretch, building facades are also non-continuous, and generally but setbacks are narrow at least 30 feet from the street.</p>
3.3-7	29.17	<p>Add fifth bullet under "General Plan Policies:"</p> <ul style="list-style-type: none"> <li>• A "T" zone was adopted as part of the Colma Municipal Code, Section 5.335.2 to designate a transit route along the CalTrain right-of-way through Colma. Provisions of the T zone state that "No person may erect, construct, enlarge or improve any public or private transit building or transit structure in the T zone, or permit the same to be done, unless such building or structure is underground and covered with soil so as to make its location indistinguishable from adjacent terrain."</li> </ul>
3.3-8	19.67	<p>Revise paragraph two, sentence one:</p> <p>At South San Francisco's common boundary with Colma, the Treasure Island Trailer Court, consisting of approximately 200-350 mobile homes,...</p>
3.3-13	19.68	<p>Add bullet as the fourth one from the end:</p> <ul style="list-style-type: none"> <li>• Francisco Terrace Tot Lot - On the north side of South Spruce Avenue between Terrace Drive/Huntington Avenue and the CalTrain tracks.</li> </ul>

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3.3-13	72.197	Delete last bulleted item.
3.3-14	72.198	Revise paragraph five, sentence two:  Exceptions include the large-scale, mid-rise Tanforan Park Shopping Center, the <u>Towne Center shopping complex</u> , the I-380 viaduct, and SFIA-related facilities east of Highway 101.
3.3-14	72.198	Revise last paragraph:  At the common border of San Bruno and South San Francisco, large commercial <u>and industrial buildings and small lot homes along Huntington Avenue</u> comprise the built environment in the project corridor <u>west of the SPTCo tracks, and small-lot homes of the Fifth Addition neighborhood define the corridor east of the tracks.</u>
3.3-15	72.200	Revise paragraph three, sentence one:  Huntington Avenue <u>between Pine Street and the southern city limits south of the Central Business District to Lomita Park contains predominantly low-rise residential uses on its west side and the CalTrain corridor on its east side, multi family and commercial units on both sides of the project corridor.</u>
3.3-16	72.201	Revise the text describing Photo 13:  Belle Air Neighborhood Home on Third <u>Avenue Street</u> , North of Angus Avenue Facing <u>West North</u> .
3.3-18	72.196	Insert at end of carryover paragraph:  Huntington Avenue between Sneath Lane and Noor Avenue is 130 feet from the proposed centerline of the BART tracks under all BART build alternatives. (A view from the hall toward industrial land uses in South San Francisco is shown in Photo 11 of Figure 3.3-3.)
3.3-18	72.203	Revise paragraph two, sentence one as follows:  Parks in San Bruno in the vicinity of the project corridor include the <u>Bayshore Circle Park, Herman Tot Lot, both in the Fifth Addition neighborhood; the 7th and Walnut Park....</u>
3.3-18	72.204	Revise paragraph four, last sentence:  Mature trees and well-manicured yards are characteristic of the streetscape in the Belle Air neighborhood <u>along east of Huntington Avenue</u> in San Bruno (Figure 3.3-4, Photo 19).

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3.3-26	14.53	Replace paragraph five, sentence two:  A congregate care facility is proposed at 1733 California Drive between Trousdale Drive and Dufferin. This facility would also be located approximately 160 feet from the proposed BART alignments and thus, no visual impact would occur.
3.3-28	186.11	Revise paragraph one, sentence one:  Rollins Road is a <del>two-</del> <u>four</u> -lane road which runs through an industrial and office area.
3.3-29	29.18, 40.8	Replace Mitigation Measure 2.1:  2.1 <i>Vegetation Replacement.</i> BART will prepare a Landscape Plan and install ground cover, shrubs, and replacement trees in those areas disturbed during construction with species chosen in cooperation with the local jurisdiction and the cemeteries and based on recommendations in the arborist's report. Planting densities, plant sizes, and species will be selected to complement adjacent, undisturbed cemetery vegetation and to provide a similar level of vegetative screening as existed prior to BART construction.
3.3-35	72.197	Revise paragraph four, sentence three:  The nearest sensitive receptor is the Summerfield Suites Hotel in <u>South San Francisco</u> <u>San Bruno</u> .
3.3-39	72.210	Revise Impact 12, first sentence:  The proposed Tanforan Station platform and <u>475 feet of at-grade tracks</u> <u>550 feet of surface track</u> would be constructed....
3.3-53	19.74	Revise Impact 7:  7. <i>Ancillary facilities proposed for the Base Case Alternative in South San Francisco would be visible along the alignment but would not alter the visual setting and create a sense of encroachment for residences within 60 feet. (S) (I)</i>  The following sentence replaces the subsequent three paragraphs in the existing text:  The ancillary facilities would be situated in the same location as described under the proposed project.
3.3-77	72.218	Revise Mitigation Measure 11.2, first sentence:  BART will provide extensive landscaping along <u>the western edge of the widened</u> Huntington Avenue to protect homes <u>on the west side of the street...</u>

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3.3-82	47.13	Revise the first sentence in Impact 18:
		18. <i>Under Alternative V, the Millbrae Intermodal Station parking structure, the ALRS, and Highway 101 ramps would be incompatible in scale with the Marino Vista and North Millbrae neighborhoods.</i>
3.3-83	47.13	A new fourth bullet is added under the heading “Design Option V-A – Minimum Length Subway to Airport GTC”:
		<ul style="list-style-type: none"> <li>• Addition of an elevated guideway for the ALRS, approaching either downtown San Bruno Station from San Bruno Avenue and circling the station;</li> </ul>
3.3-83	47.13	Add above the heading “Subway Option.” Rerun each of the subsequent impact statements.
<b>Subway and Aerial Options</b>		
		1. <i>The ALRS would serve the downtown San Bruno optional station locations and have significant visual impacts on the built environment and for nearby sensitive receptors. (S)</i>
		Under Design Option V-A, the ALRS would connect the Airport and downtown San Bruno stations via an aerial guideway along San Bruno Avenue. The aerial alignment down a widened street would make it more difficult for the city to attain its objective of visually enhancing this major entryway to the city. The above-grade configuration would also obstruct distant views of San Bruno Mountain.
		At the station locations, the ALRS would be about 15 feet above ground and pass within 60 feet of existing residents. Specifically, at the I-380/San Bruno Station option, the ALRS would alter views and create perceptions of visual encroachment for residents along 2nd Avenue. The same effects would occur at the Downtown San Bruno Station option for residents along 3rd and Angus Avenues.
		MITIGATION MEASURES. The same measure recommended for the proposed project, i.e., ALRS design guidelines (Mitigation Measure 17.1), applies to this design option. Although it would reduce the visual effects, it would not reduce them to insignificant levels.
3.3-83	72.226	Revise second bulleted item:
		<ul style="list-style-type: none"> <li>• Addition of a <del>fourth</del> <ins>third</ins> level to the I-380 San Bruno Intermodal Station structure (impacts would be the same as those identified for Alternative V; an additional level would not add measurably to the already significant effect);</li> </ul>

Page No.	Response No.	Revised Text
3.3-83	72.226	<p>Revise third bulleted item:</p> <ul style="list-style-type: none"> <li>• Addition of a <u>third</u> <u>fourth</u> level to the Downtown San Bruno Intermodal Station parking structure (impacts would be the same as those identified for Alternative V; an additional level would not add measurably to the already significant effect);</li> </ul>
3.3-83	47.13	<p>Insert new fourth bullet:</p> <ul style="list-style-type: none"> <li>• Addition of an elevated guideway for the ALRS, approaching either downtown San Bruno Station from San Bruno Avenue and circling the station;</li> </ul>
3.3-84	47.13	<p>Replace the last two sentences under the paragraph on Design Option V-B:</p> <p>The ALRS would be constructed as described under Design Option V-A. The visual effects of the ALRS and the station facilities on Belle Air residents would be significant, altering close-up views and creating perceptions of visual encroachment.</p>
3.3-88	17.79	<p>Add after Alternative VI, Impact 12, sentence four:</p> <p>The retained cut wall would be visible to residents along Huntington Avenue between Forest Lane and Euclid Avenue but would be greater than 60 feet from sensitive receptors.</p>
3.3-89	14.52	<p>Add to Impact 15 after the first paragraph:</p> <p>From higher elevations in the hills to the west, the Millbrae Avenue Station would be visible in the distance. The four-story garage and other station facilities would be noticeable and would introduce a new visual element out of character with the surrounding development. However, at this distance, the viewshed encompasses a large area and the garage structure would not dominate distant views.</p>
3.3-92	72.227	Revise Table 3.3-1 as shown on the following page.
3.4-11	6.20	<p>Revise paragraph three, sentence one:</p> <p>A description of the Millbrae Train Station, as well as <u>five</u> <u>six</u> other properties potentially eligible for the NHRP....</p>
3.4-11	6.21	<p>Revise paragraph one, sentence five:</p> <p><u>The Old Colma Railroad Station will be removed from its temporary storage location in the project APE and would not be affected by development of any BART build alternative will be deeded to the Town of Colma and relocated (under the terms of an MOA currently being prepared), prior to construction of the proposed BART extension.</u></p>
3.4-12	6.20	Revise Figure 3.4-3 to delete the callout and paragraph indicating the United Airlines Hangar.

**Table 3.3-1**  
**Comparison of Visual Impacts by Alternative**

Proposed Project	I-380 Least -Cost Design Option	Alternative II TSM		Alternative III Base Case		Alternative IV Airport Aerial East of Hwy 101		Alternative V Subway to Millbrae		Design Option V-A Min. Length		Design Option V-B Min. Length		Alternative VI Avenue via International Subway to Airport San Bruno Terminal	
		II	TSM	III	Base Case	Airport	Aerial	East of Hwy 101	V	Subway to Millbrae	GTC	Length	Subway to GTC	Length	International Subway to Airport
<b>MILLBRAE</b>															
Built Env.	5	5	5	5	5	4,5	4,5	4,5	4,5	5	5	5	5	5	4
Significant Views/Scenic Resources	1,5	1,5	5	5	1,5	4,5	4,5	4,5	4,5	5	5	5	5	5	0
Sensitive Receptors	0	0	0	0	0	1,4	1,4	1,4	1,4	1,4	1,4	1,4	1,4	1,4	4
Streetscape	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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3.4-14	6.19	Replace first complete sentence at the top of page 3.4-14:  The original 1860s era station burned in 1890 and the current structure dates to 1907. It is a two-story, wood frame clapboard structure with colonnade on track side. There are no outbuildings or other features that contribute to the significance of this property. The nominated property is within a 62 foot by 94 foot rectangle of land, which surrounds the structure.
3.4-14	6.20	Delete the paragraph describing the United Airlines Hangar.
3.4-15	16.3	Revise Mitigation 2.1:  2.1 <i>Archaeological Testing and Compliance with SPHO Procedures.</i> During the engineering design phase of this project and/or in conjunction with utility relocation activities, BART will have a trained archaeologist perform a mechanical trench excavation (using a backhoe) to establish the presence or absence of archaeological soils at site CA-SMA-299. If subsurface prehistoric materials are uncovered, then the procedures of the State Historic Preservation Officer, which call for the materials to be excavated, catalogued, analyzed, evaluated and curated will be followed prior to construction activities. These activities should be conducted by a member of the Society of Professional Archaeologists. If the archaeologist concludes that there is an absence of archaeological material beneath this area after excavation activities, BART would conclude that deposits are not likely to be found during construction.  Nevertheless, for CA-SMA-299 and for all construction sites, construction personnel would be supplied information about the basic characteristics of archaeological deposits and Native American artifacts. Contractors would be told to cease earthmoving activities if these resources are identified at during construction. If any cultural remains are uncovered, work within ten feet of the resources should be stopped immediately, a qualified archaeologist should be retained and actions as stated on page 13 of the Archaeological Resources Report would be implemented.
3.4-15	12.4	Add at the end of Mitigation Measure 2.1:  If human remains are uncovered during project implementation, work in the sensitive area will cease temporarily and the Coroner will be notified immediately. If the Coroner determines that the remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission, who will immediately notify those persons it believes to be most likely descended from the deceased Native American.
3.4-17, 3.4-18	1.2.	Revise Mitigation Measure 6.1:  6.1 <i>Memorandum of Agreement.</i> For any adverse effects to properties determined to be eligible for inclusion in the National Register, a Memorandum of Agreement (MOA) will be required of BART, SamTrans, the SHPO, the FTA, and the Advisory Council on Historic Preservation (ACHP) to specify the terms, conditions, and restrictions

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		under which the bridge or other property may be disturbed. <del>The</del> <ins>Each</ins> MOA will delineate a specific mitigation plan that establishes the actions that must be taken and who is responsible for implementation. Specifically, the MOA will make explicit BART's obligation and actions for mitigation. <del>The</del> <ins>Each</ins> MOA will be agreed to prior to disturbance of the bridge or other property; BART will comply with all terms of the MOAs.
3.4-25	19.80	Revise Mitigation Measures under Impact 6, sentence two:  Mitigation Measure <del>5.1</del> <ins>6.1</ins> , i.e., the Memorandum of Understanding...
3.4-31	6.20	Revise paragraph four, sentence two:  The cultural resource impacts of this option are the same as those described for Alternative V, except that the alignment would not be near the potentially historic properties at 540 San Antonio and the pump house, <del>but would be proximate to the United Airlines Hangar as described below and therefore there would be no impact as a result of implementation of Design Option V-A.</del>
3.4-31, 3.4-32	6.20	Delete Impact 1 and the paragraph that follows.
3.4-33	19.81	Add paragraph under the Impact 2 statement:  MITIGATION MEASURE. Mitigation Measure 2.1, i.e., archaeological testing and compliance with SHPO procedures, also applies to Alternative VI. Implementation of this measure would reduce impacts to the shell midden to an insignificant level.
3.4-34	6.20	Revise first sentence of second paragraph under Impact 8:  <del>Five</del> Six buildings adjacent to the right-of-way are potentially eligible for inclusion on the National Register: 757 Huntington Avenue, San Bruno (the American Legion Post); 601-605 and 609-617 San Mateo Avenue, San Bruno (early commercial buildings in downtown San Bruno); 540 San Antonio Avenue, San Bruno (a Craftsman-style house); and 1000 El Camino Real, Millbrae (the San Francisco Water Department pump house). <del>+ and the United Airlines Hangar.</del>
3.4-34	6.24	Revise paragraph three and delete "Mitigation Measures" paragraph:  <del>The</del> Based on additional engineering performed in this segment the Millbrae Railroad Station <del>would not need to be relocated</del> <del>would be moved 15 feet west of its present location to accommodate the BART and CalTrain tracks.</del> The building is on the National Register, and its relocation <del>of the platform to the</del> Millbrae BART Station would not be considered affected a significantly nor would it be impacted pursuant to Section 106 and CEQA (Appendices G and K) criteria.
3.4-34	6.20	Revise the first sentence of second paragraph under Impact 8:  <del>Five</del> Six buildings adjacent to the right-of-way are potentially eligible for inclusion on the National Register: 757 Huntington Avenue, San Bruno (the American Legion

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		Post); 601-605 and 609-617 San Mateo Avenue, San Bruno (early commercial buildings in downtown San Bruno); 540 San Antonio Avenue, San Bruno (a Craftsman-style house); and 1000 El Camino Real, Millbrae (the San Francisco Water Department pump house); and the United Airlines Hangar.
3.4-34	6.24	Add to paragraph three, after sentence two:
		The National Register of Historic Places Inventory Nomination Form for this property indicates that its setting is not a contributing element in its National Register status and the property consists only of the building on a small (62 by 94 feet) plot. In any case, the urban- and transportation-related setting of the property would not be significantly altered.
3.5-1	19.82	Revise paragraph four, sentence one:
		The South San Francisco Police Department, located at 33 Arroyo Drive, currently has <u>75</u> <u>73</u> sworn officers on six shifts and <u>20</u> <u>volunteer resources on six shifts</u> authorization for 35 volunteer reserves with only <u>23</u> <u>volunteer reserves actually available at this time</u> .
3.5-1	72.230	Revise paragraph five, sentence two:
		The department employs <u>47</u> <u>50</u> sworn officers and 12 volunteer reserves on three shifts and three patrol beats, and uses 13 squad cars and two canines.
3.5-3	72.231	Revise paragraph one, sentence one:
		The Millbrae Police Department, at 621 Magnolia Street, employs <u>23</u> <u>25</u> sworn officers and has seven volunteer reserves and ten squad cars.
3.5-3	24.45	Replace sentences one and two of paragraph four:
		The SFIA Police Bureau has a current budgeted staff of 267 personnel: 167 sworn officers, 93 police service aids, and 7 civilian support staff. Some of the operational capabilities include traffic patrol, foot patrol, undercover team, narcotics, special management and response team, K-9 explosive detection team, explosive detection disposal team, intelligence team, and ground transportation/certification/enforcement unit. The Bureau participates in the San Mateo County Emergency Road Block System which is put on alert during major criminal incidents.
3.5-7	29.25	Revise paragraph two under Wastewater Treatment:
		Wastewater treatment for the Town of Colma is provided by both <u>two sources</u> : the North County Sanitation District (District), administered by the City of Daly City, and the South San Francisco/San Bruno Joint Sewer Facilities (Joint Facilities), administered by the City of South San Francisco. <u>Colma currently generates approximately 47,000 gallons per day (gpd), 10 percent of its allotment (Mau, 1993). The Town of Colma has purchased 490,000 gallons per day (gpd) reserve capacity in the District and 450,000 gpd reserve capacity in the Joint Facilities. The Town of Colma currently (1994) discharges approximately 53,560 gpd (11 percent of reserve) to the District and approximately 96,500 gpd (21 percent of reserve) to the Joint Facilities.</u>

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3.5-8	24.43	Replace the last paragraph:
		BART is currently negotiating with each jurisdiction in the project corridor to enter into a "San Francisco Bay Area Rapid Transit District Emergency Procedures Policy, Vital Fire Protection Equipment, Communications, and Training Equipment." A liaison would be designated to serve on the BART Fire Liaison Committee and attend bi-monthly coordination meetings with BART Safety Department staff.
3.5-15	29.26	Revise paragraph three, sentence one:
		<u>Water and wastewater treatment demand in Colma in 1998 would be approximately 0.18 mgd</u> <u>0.19 mgd</u> and in 2010 approximately <u>0.23 mgd</u> <u>0.21 mgd</u> .
3.5-15	29.27	Revise last paragraph, sentence two:
		<u>This flow would be combined with the projected 4.98 mgd in 2010 from San Bruno</u> <u>and .021 mgd from Colma</u> , since both all cities are served by the south San Francisco Joint Sewer Facilities treatment plant.
3.5-16	29.27	Revise paragraph three, sentence two:
		<u>These future flows would be combined with South San Francisco's</u> <u>and Colma's</u> , since both San Bruno and South San Francisco all three cities are served by the South San Francisco/San Bruno Joint Sewer Facilities treatment plant
3.5-21	24.50	Revise paragraph one:
		<u>In addition, SFIA police and fire departments would experience an increase in calls for service from the proposed Airport Long-Term Parking Station beyond that analyzed in the SFIA Master Plan EIR.</u> According to the SFIA Master Plan Final EIR, the SFIA police and fire departments would already require additional staff to meet the projected short- and long-term needs of SFIA under the Master Plan.
3.5-23	24.98	Revise paragraph three, sentence two:
		<u>According to the SFIA Master Plan Final EIR, the SFWD may be able to meet the SFIA's long-term demand, but water conservation measures should could be implemented.</u>
3.5-27	24.51	Revise paragraph six, sentence one:
		<u>In addition, SFIA police and fire departments would experience an increase in calls for service from the proposed Airport International Terminal Station beyond that analyzed in the SFIA Master Plan EIR.</u>

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3.5-27	24.51	<p>Revise paragraph six, sentence two:</p> <p>According to the <i>SFIA Master Plan Final EIR</i>, the SFIA police and fire departments would already require additional staff to meet the projected short- and long-term needs of SFIA regardless of a BART extension under the Master Plan.</p>
3.6-8	72.235	<p>Revise paragraph one, first sentence:</p> <p>Within the project corridor, Bay Mud deposits extend from the San Bruno Fault at approximately 2nd Avenue just west of Highway 101 to the SFIA and below the San Francisco Bay.</p>
3.6-8	1.9	<p>Replace paragraph seven, sentence two:</p> <p>Some landslides have occurred on the sides of San Bruno Mountain, but none are close enough to the project corridor to affect the proposed project.</p>
3.6-9	72.233	<p>Revise paragraph three, sentence three:</p> <p>The location mapped by Bonilla intercepts the project corridor in three locations, as shown in Figure 3.6-2 <u>Figure 3.6-2a</u>.</p>
3.6-9	1.9	<p>Delete paragraph three, sentence five.</p>
3.6-14	1.3	<p>Replace page 3.6-14, paragraph two, beginning with sentence two:</p> <p>Peak ground surface acceleration on alluvium for the MCE from the equations of Boore et al. (1993) and Campbell and Bozorgnia (1994) averages to a value of 0.67g. On soft soil sites, such as those located on Bay Mud near the SFIA, the peak ground surface acceleration will probably not exceed 0.50g (Idriss, 1991). Therefore, the peak ground surface acceleration resulting from the peak bedrock acceleration of 0.68g on the San Andreas Fault is estimated to range from 0.50g to 0.67g in the project corridor, depending upon the type and thickness of the soils overlying the bedrock.</p>
3.6-15	1.3	<p>Revise paragraph one, sentence three:</p> <p>The ground surface acceleration from an earthquake on the San Andreas Fault, as noted above, would be approximately 0.45g <u>0.50g</u> to 0.60g <u>0.67g</u> from a peak bedrock acceleration of 0.68g.</p>
3.6-15	1.9	<p>Add to second complete paragraph, after sentence four:</p> <p>However, clayey sands liquefy only if the clay content is quite low.</p>
3.6-15	1.8	<p>Add to the end of third complete paragraph:</p> <p>Occasional sand layers known to exist locally in the Bay Mud may also be susceptible to liquefaction.</p>

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3.6-15	1.9	Add to paragraph five, after sentence one:  Localized liquefaction is a possibility near the mouth of Colma Creek, where deposition of alluvial sand sometimes causes a maintenance problem, but this area is not located near the BART alignment and would not impact the project.
3.6-17	1.7.	Add a new paragraph to Impact 1, after paragraph three:  Offshore geophysical surveys have detected a zone of faults that are approximately in line with the San Bruno fault as postulated onshore. This offshore zone has been mapped by McCulloch and Greene (1990). A report by Kennedy et al. (1987) states that these features are a potential geologic hazard. Evidence presented in that report indicates displacement of sedimentary deposits of late Pliocene to Quaternary age located offshore and onshore in the vicinity of Lake Merced. It is not known how far the offshore fault zone extends to the southeast. Small earthquakes that may be on the San Bruno fault have been recorded near Lake Merced and near San Francisco International Airport. In view of these uncertainties, a search for evidence of the San Bruno fault and its recency of activity will be performed before and during construction of the project alignment. This search will include various geological and geophysical investigations, including a geological examination of borehole data and a geological examination and mapping of all excavation cuts. On the basis of these investigations, the final design of the project and proposed mitigation may be refined to incorporate the geological data.
3.6-25, 3.6-26	1.3	Revise Mitigation Measure 1.1, Seismic Design Criteria, sentence two:  The maximum credible earthquake within the project corridor is a magnitude 8.0 event, occurring on the San Andreas Fault, with a peak bedrock acceleration of approximately 0.68g and peak ground surface acceleration of <u>0.45g</u> <u>0.50g</u> to <u>0.60g</u> <u>0.67g</u> .
3.7-23	72.237	Revise Photo 2 legend:  Chestnut Station site, Colma Creek and Spur Track from Kaiser 4th floor parking structure, facing Northeast Southeast.
3.7-34	72.238	Revise paragraph two, sentence two:  Cupid Row Canal would have to be redirected <u>further</u> to the East where it passes under San Bruno Avenue.
3.7-44	24.65	Delete third full paragraph.
3.7-59	24.65	Delete first paragraph.
3.8-2	29.31	Revise first paragraph under Flood Areas within the Project Corridor:  <del>Near the Colma BART Station currently under construction, the Daly City storm drain enters a junction structure. Near the intersection of F Street and El Camino Real, the Colma BART Station storm drain merges into the F Street culvert box. Because the downstream storm drain has one-half of the waterway area of the upstream storm drain, the excess flow is forced through a</del>

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		<u>side channel floods El Camino Real and backs up into the Meadowbrook Trailer Park on the northwest side of the intersection, where it ponds. During a 50 year storm....</u>
3.8-2, 3.8-8	19.91	Revise paragraph four:
		The northern portion of the project corridor generally follows the existing alignment of Colma Creek. Colma Creek is an urban stream with a highly developed watershed that includes the Colma Creek and Guadalupe Canyon Basins. <u>Since 1974, Daly City, Colma and South San Francisco have undertaken a number of projects to upgrade Colma Creek and collection facilities within the basin to provide conveyance capacity adequate to carry storm flows resulting from a 50-year storm. Colma Creek is sized adequately to contain the 100 year storm event, and FEMA maps show this storm event to be "contained in channel."</u> This indicates that the channel is adequate to carry flow from upstream without overtopping the banks. Nonetheless, the <u>FEMA maps also show flooding around the channel as many areas along Colma Creek are subject to flooding....</u>
3.8-14	24.62.	Add after the last sentence, paragraph five (Mitigation Measure 3.2, Onsite Storage):
		All retention ponds or subsurface structures will be sited to avoid any disturbance of existing wetland habitats.
3.8-16, 3.8-17	19.94	Revise Mitigation Measure 5.1:
		MITIGATION MEASURES. The following mitigation <u>measure</u> <u>measures</u> would reduce the impact of nonpoint source pollution to an insignificant level.
		<p>5.1 <i>Oil and Water Separators in Catch Basins.</i> BART will require in its construction documents that oil and water separators be installed in catch basins located in parking lots to separate contaminants from runoff entering the stormwater system. The effectiveness of these separators depends upon the level of maintenance they receive. BART will regularly clean out these separators before the rainy season. <u>Although these separators are generally effective in removing oils and other large sediments, they do not remove dissolved toxins or heavy metals which may be suspended in the run-off waters. The best way of controlling these compounds is by preventing them from entering the system.</u></p> <p>5.2 <i>Best Management Practices.</i> Oil/water separators are generally effective at removing oils and large sediments; they do not, however, remove dissolved toxins or heavy metals which may be suspended in the stormwater runoff. The best way of controlling these compounds is by preventing them from entering the system. <u>To reduce these pollutants, BART will apply Best Management Practices including regular sweeping of the parking areas, strict adherence to guidelines regarding application of fertilizers and pesticides in landscaped areas, and regular cleaning and maintenance of catch basins.</u></p>

Page No.	Response No.	Revised Text
3.8-17, 3.8-27, 3.8-29 3.8-33	25.1	Revise Impact 6:  6. <i>Reconstruction of a stretch of Colma Creek in South San Francisco under the proposed project would improve the discharge of stormwaters result in a damming effect that may aggravate flooding of the Treasure Island Trailer Park during storm events. (BS)</i>
		The proposed project alignment is either below grade or along the existing grade of the SPTCo rail line and will not adversely affect overland drainage patterns. The Hickey Station site will entail the enclosure of Colma Creek in a box culvert. This will increase the capacity of Colma Creek. The improved hydraulic characteristics of Colma Creek will reduce upstream flooding to some extent. Flood waters originating from north of the intersection of Mission Road and the BART alignment would pond as a result of the damming effect of the drainage improvements and would flood the Treasure Island Trailer Park.
		<u>MITIGATION MEASURES. The following mitigation measure would reduce the impact of flooding of Treasure Island Trailer Park to an insignificant level.</u>
		<u>6.1 Drainage Improvements. BART will construct drainage improvements consisting of the following: (1) a new open channel north of the Hickey Station parking lot, thereby combining the flow of existing Colma Creek with surface flood waters resulting from BART facilities; (2) a box culvert beneath the parking lot to accept the combined flow of Colma Creek and surface flood waters; and (3) an open channel connected to the box culvert which would deliver the combined flow to the existing channel on Mission Road and Oak Streets.</u>
3.9-12	*	Revise Table 3.9-4 under "Special-Function Buildings and Outdoor Areas:"  <u>Maximum Passby Noise Vibration Levels</u>
3.9-13	*	Revise Table 3.9-5:  <u>Special Function Buildings and Outdoor Areas</u>  <u>Maximum Passby Velocity Level (db re 10<sup>-6</sup>) Noise Levels (dbA)</u>
3.9-13	72.254	Revise paragraph one, sentence two:  Table 3.9-5 <del>on the following page</del> below presents criteria for evaluating the impact of groundborne vibration of floor surfaces within a building.

Page No.	Response No.	Revised Text
3.9-26	6.17	<p>Replace Mitigation Measure 6.1:</p> <p>6.1 <i>Concrete Barrier.</i> Implementation of a standard 3- to 4-foot-high concrete safety barriers along the edges of the highway ramps would reduce the cumulative noise impact to the six to ten homes on Madrone and Spruce Streets to a level that would be less than significant for combined noise from BART trains, freeway ramp traffic and general traffic increases in the area.</p>
3.9-32	24.69	<p>Revise paragraph four, sentence three:</p> <p>This reduction in aircraft noise is expected due to noise abatement efforts described in the SFIA Master Plan <u>and the gradual shift to quieter aircraft required by SFIA regulations and federal law.</u></p>
3.9-78	19.106.	<p>Revise sentence one, under Mitigation Measures for Impact 4:</p> <p>Implementation of Mitigation Measures 4.1, 4.2, 4.3, <u>and</u> 4.4, <u>and</u> 4.5, i.e., compliance with design limits through use of a floating slab trackbed, resiliently supported ties or soft rail fasteners, at-grade sound wall or other equivalent mitigation measures, offsite mitigation and relocation, as recommended for the proposed project, would reduce the impacts of Alternative VI to an insignificant level. <del>except possibly for the homes in the Treasure Island Trailer Court and along Myrtle Avenue.</del></p>
3.10-18 to 72.265 3.10-73		<p>Replace Carbon Monoxide Concentrations at the Intersection of El Camino Real and San Bruno Avenue in Tables 3.10-7 through 3.10-10, Tables 3.10-12 and 3.10-13, and Tables 3.10-18 through 3.10-39 as shown on the following page.</p>
3.10-28 to 72.265 3.10-30		<p>Replace Cumulative Carbon Monoxide Concentrations at the Intersection of El Camino Real and San Bruno Avenue in Tables 3.10-14 through 3.10-16 as shown below.</p>
3.12-7	107.163	<p>Revise Table 3.12-3, column headings:</p>

Fleet Mix	No Build <u>Proposed Project</u>	TSM <u>No Build</u>	Proposed Project <u>TSM</u>
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Revised Carlton Monoxide Concentrations at the Intersection  
of El Camino Real and San Bruno Avenue

DEIR/ Technical Appendix	Table No.	Alternative	Net or Cumulative	1-hour				El Camino Real/San Bruno Avenue Revised CO Concentration (ppm)				2000	2010	A.M.	P.M.
				1993	1998	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.				
3.10-7	LPA	Net	1-hour	10.5	10.4	44.4	9.3	44.4	10.0	40.4	8.8	40.6	9.1	7.4	7.1
3.10-8	LPA	Net	8-hour	4.3	4.2	5.8	3.9	5.3	4.3	4.7	3.7	4.8	3.9	3.2	3.0
3.10-9	LPA	Cumulative	1-hour	17.0	18.2	45.4	13.4	45.9	14.2	43.4	11.8	44.0	12.5	8.7	8.2
3.10-10	LPA	Cumulative	8-hour	8.1	8.8	7.3	6.3	7.8	6.8	6.4	5.5	6.8	5.9	3.9	3.6
3.10-12	No Build	Cumulative	1-hour	16.7	17.7	12.9	13.9	11.5	12.4	12.4	12.4	8.0	8.3		
3.10-13	No Build	Cumulative	8-hour	7.9	8.5	6.0	6.6	5.3	5.9			3.5	3.7		
3.10-18	TSM	Cumulative	1-hour	16.9	18.4	12.9	13.9	11.6	12.4			8.0	8.2		
3.10-19	TSM	Cumulative	8-hour	8.0	8.9	6.0	6.6	5.4	5.9			3.5	3.6		
3.10-20	Base Case	Net	1-hour	10.5	10.4	40.8	9.5	44.7	10.1	9.8	8.8	40.7	9.1	7.6	7.1
3.10-21	Base Case	Net	8-hour	4.3	4.2	4.8	4.0	5.3	4.4	4.3	3.7	4.9	3.9	3.2	3.0
3.10-22	Base Case	Cumulative	1-hour	17.0	18.3	45.4	13.6	45.9	14.3	43.2	11.8	44.4	12.5	8.7	8.4
3.10-23	Base Case	Cumulative	8-hour	8.1	8.9	7.3	6.4	7.8	6.9	6.3	5.5	6.9	5.9	3.9	3.6
3.10-24	Alt. IV	Net	1-hour	10.9	10.7	10.4	10.3	8.9	9.1			7.1		7.1	
3.10-25	Alt. IV	Net	8-hour	4.5	4.4	4.6	4.5	4.5	3.8			3.9	3.0		
3.10-26	Alt. IV	Cumulative	1-hour	17.3	18.3	14.1	14.5	12.3	12.8			8.3	8.4		
3.10-27	Alt. IV	Cumulative	8-hour	8.3	8.9	6.7	7.0	5.8	6.1			3.7	3.8		
3.10-28	Alt. V	Net	1-hour	11.5	10.8	9.9	10.4	9.2	9.3			7.0	7.1		
3.10-29	Alt. V	Net	8-hour	4.8	4.4	4.3	4.6	4.0	4.0			2.9	3.0		
3.10-30	Alt. V	Cumulative	1-hour	17.6	18.4	14.2	14.7	12.6	12.8			8.3	8.4		
3.10-31	Alt. V	Cumulative	8-hour	8.4	8.9	6.8	7.6	6.0	6.1			3.7	3.8		
3.10-32	Des. Opt. V-B	Net	1-hour	10.9	10.7	42.5	10.0	43.8	10.4	44.3	9.0	42.3	9.1	8.0	7.0
3.10-33	Des. Opt. V-B	Net	8-hour	4.5	4.4	5.8	4.3	6.6	4.6	5.4	3.8	5.8	3.9	3.7	3.0
3.10-34	Des. Opt. V-B	Cumulative	1-hour	17.3	18.3	46.8	14.1	46.4	14.7	44.6	12.4	44.5	12.8	9.4	8.4
3.10-35	Des. Opt. V-B	Cumulative	8-hour	8.3	8.9	8.2	8.7	8.4	7.1	7.6	5.9	7.1	6.1	4.3	3.7
3.10-36	Alt. VI	Net	1-hour	11.0	10.4	10.7	9.2	12.0	8.9	9.7	8.7	11.4	9.0	7.8	7.1
3.10-37	Alt. VI	Net	8-hour	4.6	4.2	4.7	3.9	6.4	3.7	4.9	3.7	5.3	3.8	3.5	3.0
3.10-38	Alt. VI	Cumulative	1-hour	17.4	17.8	45.9	13.4	47.2	14.0	43.4	11.7	44.4	12.4	8.8	8.2
3.10-39	Alt. VI	Cumulative	8-hour	8.3	8.6	7.3	6.3	8.6	6.7	6.3	5.4	7.3	5.9	4.0	3.8

Revised Cumulative Carbon Monoxide Concentrations at the Intersection  
of El Camino Real and San Bruno Avenue

DEIR/ Technical Appendix Table No.	Analysis Year	El Camino Real/San Bruno Avenue Revised CO Concentration (ppm)												Alt VI												
		1993 No Build		LPA		No Build		El Camino Real/San Bruno Avenue Revised CO Concentration (ppm)		Alt IV		Alt V														
		1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour													
3.10-14	1998	17.7	8.5	44.0	14.2	24.6	6.8	13.9	6.6	44.0	14.3	24.6	6.9	14.5	7.0	14.7	7.6	44.4	14.7	24.7	7.1	44.2	14.0	24.6	6.7	
3.10-15	2000	17.7	8.5	44.0	12.5	6.4	5.9	12.4	5.9	44.4	12.5	6.9	5.9	12.8	6.1	12.8	6.1	44.6	12.8	7.4	6.1	44.8	12.4	7.4	5.9	
3.10-16	2010	17.7	8.5	8.7	8.2	3.9	3.7	8.3	3.7	8.2	3.6	8.7	8.4	3.6	8.4	3.8	8.4	3.8	8.4	4.3	3.8	0.2	8.4	4.3	3.8	1.8

Page No.	Response No.	Revised Text
3.13-4	72.290	<p>Add after the first partial paragraph:</p> <p><b>Excavation Support System.</b> An excavation support system must be installed for cut-and-cover and retained cut line construction methods to temporarily support the excavated earth surfaces while the permanent concrete subway box is constructed. Of the many available systems, two are of interest for the soil conditions in the project corridor:</p> <ul style="list-style-type: none"> <li>• <b><i>Internal Bracing</i></b> - This method is feasible where the excavation is deeper than the groundwater table or where right-of-way is not available for tie-backs. Either sheet piles, or H piles with timber lagging between, are installed on the excavation lines. Transverse steel struts are installed as the excavation proceeds to prevent the walls from moving into the empty space. When the full depth is reached, a concrete base slab is poured to stabilize the bottom. The struts are removed as the permanent concrete subway box is installed. The temporary piles are removed and the volume above the permanent box is backfilled.</li> <li>• <b><i>Tie Backs</i></b> - This method is feasible where subsurface easements are available extending out at least 30 feet from the face of the excavation. In this case, steel H piles and lagging are supported by steel rods installed and anchored in holes drilled into undisturbed soil outside the excavation. The subsurface construction easements required for these tie-backs will not interfere with any facilities or uses on the surface. Soil nailing is another type of tie back system. Tie back systems are widely used to eliminate the traverse struts of the internal bracing system which interfere with the excavation operation.</li> </ul>
3.13-5	72.286	<p>Add as last sentence, paragraph one:</p> <p>The construction rate for aerial line segments is approximately 100 feet per week.</p>
3.13-8	12.9	<p>Add to the list of possible laydown areas for the three reaches between Forest Lane and Millbrae Avenue:</p> <ul style="list-style-type: none"> <li>• <b><u>San Francisco Water Department Right-of-Way.</u></b> This stretch adjacent to the alignment could serve as a staging and access area for construction equipment.</li> </ul>
3.13-10	24.78	<p>Add information to Table 3.13-2, as shown on following page.</p>
3.13-10	66.151	<p>Revise Table 3.13-2 to indicate two months of lane restrictions on San Bruno Avenue rather than one month.</p>

**Table 3.13-2**  
**Roadway Lane Closures**

Street Name	Traffic Existing/ Decked	Lanes	Approximate Duration Lane Restrictions	Approximate Construction Time	Applicable Alternatives	Comments
Hillcrest Boulevard	0/2 2/0		<u>1 month (One month will be required to construct the new intersection of Hillcrest with Aviador)</u>	<u>1 month (One month will be required to construct the new intersection of Hillcrest with Aviador)</u>	VI	New road extension to replace Rollins Road access to Bayside Manor neighborhood.
SFIA Airport Access Roads	10/2		<u>5 months for all 10 lanes</u>	<u>24 months</u>	VI	<u>Install detours in median and on outside; remove two lanes of traffic at a time to install slurry walls and temporary roadway decking. Total time to install and remove two lanes of roadway decking: one month.</u>

Page No.	Response No.	Revised Text												
3.13-13	19.68	<p>Insert as the seventh bullet:</p> <ul style="list-style-type: none"> <li>• <u>Francisco Terrace Tot Lot - On the north side of South Spruce Avenue between Terrace Drive/Huntington Avenue and the CalTrain tracks.</u></li> </ul>												
3.13-14	72.299	<p>Revise last paragraph, third sentence:</p> <p><u>Heavy construction ...between mid-1996 and mid-1998 early 1997 and early 1999.</u></p>												
3.13-14	72.299	<p>Revise last paragraph, fourth sentence:</p> <p><u>Actual line/station...between early 1996 and late 1997 1997 and early 1999.</u></p>												
3.13-25	66.74	<p>Revise Table 3.13-10A, third and last rows in the fourth and fifth columns:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"></th><th style="text-align: center;">Earthwork Cubic Yards</th><th colspan="2" style="text-align: center;">Number of Trucks</th></tr> </thead> <tbody> <tr> <td>Earthwork</td><td style="text-align: center;"><u>1,270,500</u> <u>1,204,500</u></td><td style="text-align: center;"><u>77,000</u></td><td style="text-align: center;"><u>73,600</u></td></tr> <tr> <td>Totals</td><td style="text-align: center;"><u>—</u> <u>1,204,500</u></td><td style="text-align: center;"><u>\$14,960</u></td><td style="text-align: center;"><u>73,600</u></td></tr> </tbody> </table>		Earthwork Cubic Yards	Number of Trucks		Earthwork	<u>1,270,500</u> <u>1,204,500</u>	<u>77,000</u>	<u>73,600</u>	Totals	<u>—</u> <u>1,204,500</u>	<u>\$14,960</u>	<u>73,600</u>
	Earthwork Cubic Yards	Number of Trucks												
Earthwork	<u>1,270,500</u> <u>1,204,500</u>	<u>77,000</u>	<u>73,600</u>											
Totals	<u>—</u> <u>1,204,500</u>	<u>\$14,960</u>	<u>73,600</u>											
3.13-27	29.46	<p>Revise paragraph under Impact 1:</p> <p><u>Access to the Eternal Home Cemetery and Salem Memorial Park via Olivet Parkway would be detoured to Hillside Boulevard with appropriate signage in consultation with these cemeteries while Olivet Parkway is closed for two periods of approximately 2 months.</u></p>												
3.13-28	19.110	<p>The last sentence of Mitigation Measure 2.1 on page 3.13-28 of the LDEIR/Technical Appendix is revised as follows:</p> <p><u>However, this measure may temporarily reduce the number of parking spaces for the Boys and Girls Club at the northeast quadrant of the junction of the right-of-way and South Spruce Avenue affect Francisco Terrace Play Lot.</u></p>												
3.13-34	29.46	<p>Revise Impact 1 under Alternative III:</p> <ol style="list-style-type: none"> <li>1. <u>Construction of the retained cut alignment would require partial closure of Mission Road, Serramonte Boulevard, and Orange Avenue for two months and would impact traffic, transit, pedestrian, and bicycle circulation access to the Eternal Home Cemetery and Salem Memorial Park via Olivet Parkway would be detoured to Hillside Boulevard and signage provided in consultation with these cemeteries, while Olivet Parkway is closed for two periods of approximately two months. (I)</u></li> </ol>												

Page No.	Response No.	Revised Text
3.13-37	29.46	<p>Revise Impact 1 under Alternative IV:</p> <ol style="list-style-type: none"> <li>1. <i>Cut-and-cover construction across Mission Road, Serramonte Boulevard, and Orange Avenue would affect traffic, transit, pedestrians, and bicyclists using these streets. Access to the Eternal Home Cemetery and Salem Memorial Park via Olivet Parkway would be detoured to Hillside Boulevard and signage provided in consultation with these cemeteries, while Olivet Parkway is closed for two periods of approximately two months. (I)</i></li> </ol>
3.13-39	17.63	<p>Revise Impact 7, first sentence:</p> <p>On San Bruno Mateo Avenue and in downtown San Bruno the Fifth Addition neighborhood, construction-related traffic and pedestrian delay would have significant impact.</p>
3.13-42	29.46	<p>Revise Impact 1 under Alternative V:</p> <ol style="list-style-type: none"> <li>1. <i>Cut-and-cover construction would require lane closures on Mission Road Serramonte Boulevard, and Orange Avenue, and would affect traffic, transit, pedestrian, and bicycle circulation. Access to the Eternal Home Cemetery and Salem Memorial Park via Olivet Parkway would be detoured to Hillside Boulevard and signage provided in consultation with these cemeteries, while Olivet Parkway is closed for two periods of approximately two months. (I)</i></li> </ol>
3.13-46	29.46	<p>Add to Alternative VI, Impact 1:</p> <p>Access to cemeteries via Olivet Parkway would be detoured to Hillside Boulevard and signage provided in consultation with these cemeteries, while Olivet Parkway is for two periods of approximately two months.</p>
3.13-48	17.69	<p>Add after first paragraph:</p> <p><b>MITIGATION MEASURES.</b> The following measure would reduce the impacts to parking between Huntington Avenue and the CalTrain tracks in downtown San Bruno to an insignificant level.</p> <p>7.1 <i>Provision of Temporary Parking.</i> Temporary parking would be provided at the same or increased number of parking spaces as currently exists in the immediate vicinity of parking on Huntington Avenue from the existing San Bruno CalTrain Station to San Mateo Avenue. Only a portion of the parking would be displaced during any one stage of construction and would be temporarily replaced with an equal or greater number of parking spaces in the immediate vicinity of current parking.</p>

Page No.	Response No.	Revised Text
3.13-51	11.3	<p>Revise Impact 17:</p> <p>17. <i>Construction activity would disrupt CalTrain service. (S)</i></p> <p>Between <u>Forest Lane</u> the I-380 overpass and <u>San Bruno Avenue Cupid Row</u>, the western CalTrain track would be taken out of service for 12 to 18 months. CalTrain service would continue on a single track. Construction of the Hillcrest Boulevard underpass of the CalTrain tracks would take about four months and <u>may cause delays to CalTrain service</u> <u>CalTrain service would continue on two tracks.</u></p> <p><u>Relocation of CalTrain tracks in the vicinity of the Millbrae Station would require approximately four months.</u></p> <p><u>MITIGATION MEASURES.</u> The following measure would reduce construction impacts to CalTrain service. <u>Minor delays would be insignificant.</u> <u>(remain significant and unavoidable.)</u></p>
3.13-51	11.3	<p>Add to the end of Mitigation Measure 17.1:</p> <p>All shooflies will be equipped with power switches and the controls tied into the automatic block signal system to avoid major delays.</p>
3.13-52	11.3	<p>Revise the mitigation measure:</p> <p>17.4 <i>Maintain Two-track Operations During Construction at Hillcrest Blvd. and Millbrae Station.</i></p>
3.13-52	11.3	<p>Add at the end of Mitigation Measure 17.4:</p> <p>Temporary shooflies will be used at these locations to maintain train operations on two tracks.</p> <p>17.5 <i>Temporary Relocation of San Bruno Passenger Station.</i> During construction of the subway, the existing CalTrain station platforms, shelter, and parking must be moved to the vicinity of the I-380 overpass. Upon completion, the station facilities would be moved back to the existing location.</p>
3.13-52	24.78	<p>Add Impact 18 to Alternative VI:</p> <p>18. <i>Construction of the Airport International Terminal Station would impact existing access roads, but existing flows can be maintained without significant delays. (I)</i></p> <p>Existing traffic flows would be maintained at all times by constructing temporary detours on the two sides and in the median to allow all lanes of traffic to be taken out of service two lanes at a time for a period of one month for each two-lane detour. During this time, the slurry wall would be installed, the upper 10 feet of fill removed, a temporary deck installed, and the lanes returned to traffic. The additional detour lanes</p>

Page No.	Response No.	Revised Text
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would insure that the existing ten lanes of traffic would not be reduced during the decking operation.

The additional detour lanes would insure that the existing ten lanes of traffic would not be reduced during the decking operation. Lane channelizing and signing would be done at night to direct the traffic around the decking operation. The entire operation would be coordinated with the traffic detours required by the construction of the new international terminal.

With traffic operating on temporary decking on all lanes as described above, the end slurry walls would be completed, the box excavated and braced, the invert slab placed, the subway box structure installed, utilities reinstalled, and backfill installed.

This construction plan has proven to be an effective mitigation to traffic disruption on every major subway construction in the United States.

All of the work associated with SFIA access roads would be accomplished in conjunction with the planned SFIA International Terminal and Ground Transportation Center. Because of this association, there would be no net increase in the impact to the normal airport traffic during this phase. BART construction affecting the terminal access roads would last for approximately five months. This work would be performed sometime during a 12- to 18-month period of construction by SFIA on the new International Terminal. The timing of this five-month disruption to the airport terminal access roadway would be coordinated to complete required construction on both the Airport International Terminal Station under Alternative VI as well as the new International Terminal, thus avoiding a cumulative traffic impact. SFIA staff have stated that the BART extension would not be permitted to perform this roadway channelization unless the work were to be coordinated with the new International Terminal construction. The channelization of the airport terminal access roadway for both projects would not cause a significant impact because traffic at the points of channelization would already be traveling at relatively slow speeds. Eastbound traffic approaching the terminal, immediately to the west of the airport terminal parking garage would be slowing, primarily due to weaving of vehicles. Westbound traffic leaving the airport terminal is also traveling at slow speeds in order to negotiate the terminal loop roadway.

3.13-55      19.119      Revise paragraph three:

To minimize these effects, BART will require its construction contractors to close streets one half at a time, with two-way traffic provided on the other half; provide temporary walkways with a width of not less than 4 feet so that no business entrance is blocked; maintain access for truck deliveries to the businesses; and limit temporary total street closure to non-business hours.

3.13-58      19.115      Revise paragraph three:

Page No.	Response No.	Revised Text
		5) <i>Construction of the South Spruce Avenue overcrossing would disrupt businesses along this thoroughfare adjacent to the Town of Baden west of the Huntington Avenue neighborhood. (S)</i>
3.13-65	66.74	Revise Impact 8, paragraph six, sentence one:  Under Alternative VI, the removal of <u>50 90</u> truckloads of tunnel muck per day...
3.13-82	17.78	Revise Impact 5:  5. <i>Relocation of the San Bruno CalTrain Station to the Tanforan Station site and Construction of a temporary shoofly would temporarily alter the visual setting east of Huntington Avenue but would not occur within 60 feet of sensitive receptors; there are no significant views or well-defined streetscapes, and the SFIA property west of Highway 101, identified as a scenic resource, would not be affected. (I)</i>
3.13-95	72.306	Revise Impact 5:  5. <i>Construction of Alternative VI would occur within 30 feet of the American Legion Post, and be adjacent to the old commercial buildings on San Mateo Avenue (601-605 and 609-617) in San Bruno. (S)</i>
3.13-108	19.136	Add between sentences one and two in paragraph two:  Prior to discharging water into City storm drains during construction, BART will fill out a Stormwater Pollution Prevention Plan (SWPPP) as a condition of approval for a Building Permit, which is issued by the City of South San Francisco Department of Public Works. For discharge of water into City sanitary sewers, a permit is required from the City of South San Francisco Water Quality Control Plant.
3.13-144	66.88	Revise the text of Impact 5:  <i>Construction of Alternative VI would disturb endangered species habitat and may result in a loss of individual members of sensitive species. (S)</i>
3.13-146	3.6	Add at the end of paragraph two, under Impact 1:  Those releases that are discharged to navigable waters are regulated by the Clean Water Act and subject to certification or waiver under Section 401 of this statute. The Regional Water Quality Board will issue water quality certification as part of the 404 permit for the project.
3.13-148	19.96	Revise Impact 3, second paragraph:  Construction of the proposed project would temporarily divert 500 feet of Colma Creek north of Chestnut Avenue, <u>200 feet of 12 Mile Creek south of Chestnut Avenue</u> , 500 feet of Cupid Row Canal south of Lion's Field Park,

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		and 700 feet of Cupid Row Canal at the San Bruno Avenue crossing.
3.13-148	72.307	Revise Mitigation Measure 3.2:
		3.2 <i>Maintain Unobstructed Drainageways.</i> <u>Drainageway diversions necessary to accommodate construction activities during the wet period should be fully operational before existing drainageways are blocked off.</u> <u>Diversions of drainageways should be constructed without obstructing the existing drainage course during wet periods.</u> Only when the diversion is fully operational should the existing drainageway be blocked off.
3.13-151	19.96	Revise Impact 3, first paragraph:
		Construction of the Base Case Alternative would temporarily divert 500 feet of Colma Creek north of Chestnut Avenue, <u>200 feet of 12 Mile Creek south of Chestnut Avenue,</u> and 600 feet of drainage channel along the easterly side of the SPTCo tracks and north of the Cupid Row Canal crossing.
3.13-152	19.96	Revise Impact 3, first paragraph:
		Construction Alternative IV would divert 500 feet of Colma Creek north of Chestnut Avenue, <u>200 feet of 12 Mile Creek south of Chestnut Avenue,</u> 600 feet of drainage channel along the easterly side of the SPTCo tracks and north of the Cupid Row Canal crossing, and 400 feet of South Lomita Canal north of the Millbrae Intermodal Station.
3.13-153	19.96	Revise Impact 3, first paragraph:
		Construction of Alternative V would temporarily divert 500 feet of Colma Creek north of Chestnut Avenue, <u>200 feet of 12 Mile Creek south of Chestnut Avenue,</u> 600 feet of drainage channel along the easterly side of the SPTCo tracks and north of the Cupid Row Canal crossing, and <u>400 feet of South Lomita Canal north of the Millbrae Intermodal Station.</u>
3.13-155	19.96	Revise Impact 3, first paragraph:
		Construction of Alternative IV would divert 500 feet of Colma Creek north of Chestnut Avenue, <u>200 feet of 12 Mile Creek south of Chestnut Avenue,</u> 600 feet of drainage channel along the easterly side of the SPTCo tracks and north of the Cupid Row Canal crossing, and a portion of Cupid Row Canal at the point where the alignment crosses the canal.
3.13-158	72.308	Revise Table 3.13-12 title:
		<u>Maximum Allowable Continuous Intermittent Noise Level, dBA.</u>
3.13-162	66.97	Add after the ninth noise and vibration criterion:

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<p>The above listed noise control measures are, for the most part (e.g., Numbers 1, 4, 5, 7 and 9), equally adaptable to vibration control. Other specific mitigation measures for reducing ground vibration during construction are discussed where potentially significant vibration impacts are identified (e.g., pile driving).</p>		
3.13-198, 3.13-199	19.121	Revise Air Quality Mitigation Measures to replace "should" with "will."
3.13-205	66.101	Revise Table 3.13-18, first and third rows in the first columns:
		<u>With Relief Track Cut-and-Cover Construction</u>
4-17	66.171	Revise the first bullet under "Land Use":
		<ul style="list-style-type: none"> <li>• Acquisition of land for BART facilities and subsequent displacement of up to <u>5255 525</u> residents and 60 employees....</li> </ul>
5-2	19.16	Revise paragraph three, sentences one and two:
		<p>However, this measure may temporarily <u>reduce the number of parking spaces for the Boys and Girls Club at the northeast quadrant of the junction of the right-of-way and South Spruce Avenue affect Francisco Terrace Play Lot.</u></p>
5-2	19.16	Add under the heading "Parklands with Direct Impacts or Constructive Use:"
		<b><u>Francisco Terrace Play Lot</u></b>
		<p><b>Description.</b> This 0.23-acre park is a small playground, located at South Spruce and Huntington Avenues in the Francisco Terrace neighborhood. It is owned by the City of South San Francisco (Figure 5-2).</p>
		<ul style="list-style-type: none"> <li><b>Clauses Affecting Ownership.</b> None.</li> <li><b>Facilities.</b> A half basketball court and a playground with swings and climbing equipment geared for small children.</li> <li><b>Planned Additional Facilities.</b> None.</li> <li><b>Access.</b> Pedestrian access is from Huntington Avenue. There is no vehicle access to this park.</li> <li><b>Usage.</b> No exact figures are available, but city staff estimate that usage is low, with approximately 20 visitors per day. The park is visited by children using the play equipment accompanied by adults and teenagers playing basketball.</li> <li><b>Relationship to Other Area Parks.</b> There are no other tot lots within this immediate neighborhood. The closest similar parks are Avalon and Bayshore Circle parks, 0.6 and 0.8 miles away, respectively.</li> <li><b>Unusual Characteristics.</b> None.</li> </ul>
		<p><b>Impacts.</b> The proposed project and Alternatives III, IV, V and its design options, and Alternative VI would have a direct effect on the play lot. Under</p>

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each of these designs, the alignment would pass under South Spruce Avenue in subway configuration, emerging at grade south of the roadway. To accommodate the ascending BART tracks, South Spruce Avenue would be raised approximately 13 feet above its current profile at the CalTrain tracks. This street would remain at about its present elevation at the western edge of the Francisco Terrace Play Lot, but at the eastern edge of the park, nearer to the tracks, the roadway would be raised approximately 10 feet. A retaining wall would be constructed along the park's southern frontage to support the roadway grade, requiring the use of Francisco Terrace Play Lot for approximately six months during construction. During this time, public access to the park would be prohibited. Although the play lot would be fully restored subsequent to the construction period, a constructive use of the park pursuant to Section 4(f) would nonetheless occur.		
		Under all of the designs listed above except Alternative III, the BART tracks would be located 150 feet west of the park approximately in subway, although the alignments would transition to at-grade immediately south of the roadway, about 200 feet from the play lot. Under Alternative III, the alignment due east of the play lot would be at grade. Thus, BART train operations may generate noise effects on the play lot, adding to the ambient noise from adjoining streets and SFIA, which is 1-1/4 miles to the east. Visual effects would occur in the park due to reconstruction of South Spruce Avenue, which would be raised above grade on the south side of the park. This visual impact would not affect the use or function of the park. No vibration impacts would occur to the play lot.
		<b>Planning and Mitigation Measures.</b> Under each of the alternatives listed above, the BART alignment could be further depressed as it passes under South Spruce Avenue to avoid the need to raise the roadway and construct a retaining wall. Use of Francisco Terrace Play Lot would therefore not occur. Depressing the BART alignment under South Spruce Avenue would have the added benefit of further diminishing any changes to the play lot's ambient noise environment and avoiding visual impacts.
		<b>Coordination.</b> The City of South San Francisco Department of Parks, Recreation, and Community Development has been consulted regarding impacts to Francisco Terrace Play Lot, avoidance alternatives, and measures to minimize harm. Director Nagel agreed with the presentation of potential impacts and mitigation measures in this DEIR/Technical Appendix for Francisco Terrace Play Lot (Personal communication with Barry Nagel, March 21, 1996).
5-2 5-6	and 42.3	Delete section titled "Bayshore Circle Park."
5-4	19.16, 42.3	Revise Table 5-1 as shown on the following page.
5-5	42.3	Replace Figure 5-2 with new Figure 5-2, attached.
5-18	19.16	Revise first full paragraph, first two sentences:  <del>Three</del> Two other parklands are located in the project corridor and would

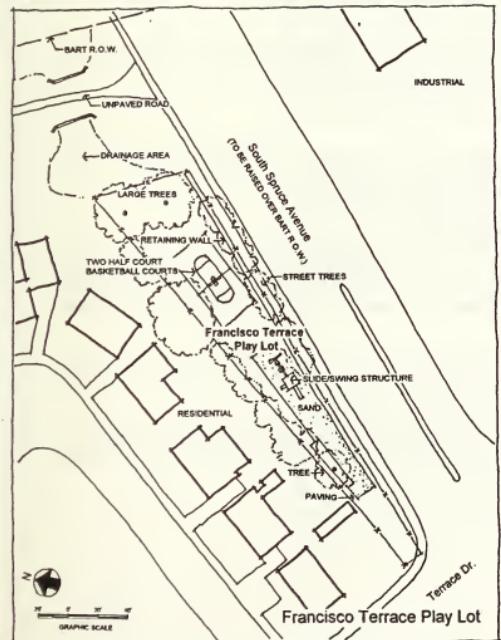
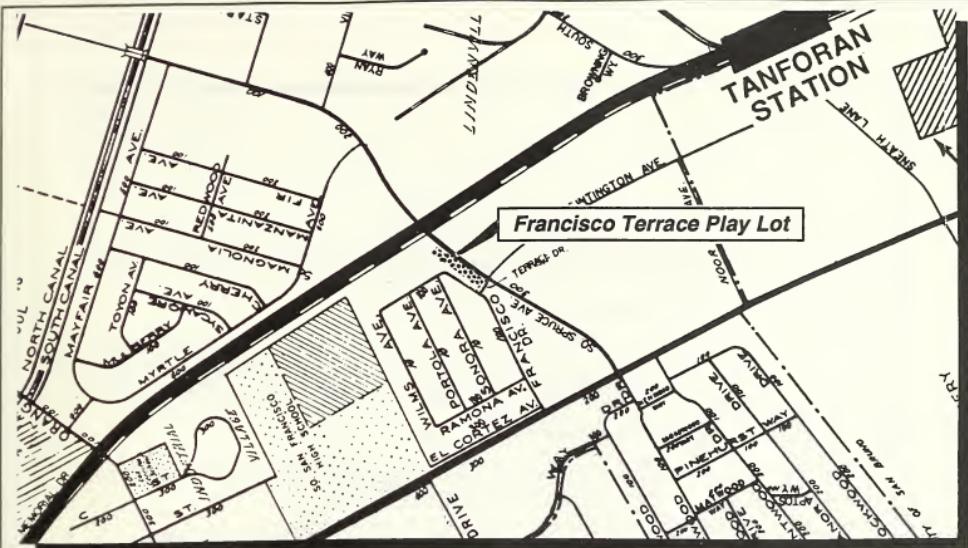
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		experience proximity impacts. These are Orange Memorial Park, <del>Francisco Terrace Play Lot</del> , and 7th Avenue Park.
5-24	6.19	Revise first complete sentence:  It dates to <del>the 1860s 1907</del> and is currently owned by Caltrans, although it is operated by the Peninsula Joint Powers Board (JPB) under a licensing agreement with Caltrans.
5-24	6.24	Revise paragraph one, sentence two:  The train station would <u>not</u> be moved <u>approximately 15 feet west of its present location to accommodate the BART railtracks</u> <u>but the station platform would be shifted 650 feet northward to the Millbrae Avenue BART Station. This would result in the south end of the platform being located approximately 100 feet north of the station.</u>
5-24	6.24	Replace paragraph two:  No mitigation is needed for this site, as it will not be relocated.
6-2	14.100	Include in footnotes to Table 6-1 of Chapter 6:  The "Right-of-Way" line item includes mitigation costs associated with the purchase of line item includes mitigations costs associated with the purchase of land on Millbrae for street widening, cultural resource preservation, biological mitigation and noise mitigation. The "line" line item includes mitigations costs associated with road modifications, soundwalls, construction measures designed to mitigate noise/vibration impacts, and landscaping. The "Stations" line item includes hydrological mitigation measures. The "Environmental mitigation" line item applies only to costs associated with mitigation of biological impacts on airport property west of Highway 101.
6-4	72.334	Revise Table 6-2:  <b>Table 6-2 Estimated Operating and Maintenance Costs in 2010 Millions of <u>1993</u> <u>1996</u> Dollars</b>
6-9	24.84	Add to paragraph one, after sentence two:  Entitlement funds, however, are used principally for the repair and maintenance of runways, taxiways and other Airport infrastructure.

**Table 5-1**  
**Parkland Impacts by Project Alternative**

Proposed Project	I-380 Least-Cost Design Option	Alternative I No Build			Alternative II TSM			Alternative III Base Case			Alternative IV Airport Aerial TSM			Alternative V Minimum Length Subway			Design Option V-A			Design Option V-B		
		PC-T	NA	NA	PC-T	NA	NA	PC-T	NA	NA	PC-T	NA	NA	PC-T	NA	NA	Min. Length Subway to Airport GTC <sup>1</sup>	Subway to San Bruno	Min. Length Subway to International Terminal			
<b>Parklands with Potential Direct Impacts or Constructive Use</b>																						
Francisco Terrace	PC-T	PC-T	NA	NA	PC-T	NA	NA	PC-T	NA	NA	PC-T	NA	NA	PC-T	NA	NA	NA	NA	NA	NA	PC-T	
Bayshore Circle	NA	NA	NA	NA	PC	NA	NA	PC	NA	NA	PC	NA	NA	PC	NA	NA	NA	NA	NA	NA	PC	
Herman Tot Lot	T	T	NA	NA	T	NA	NA	T	NA	NA	T	NA	NA	T	NA	NA	NA	NA	NA	NA	NA	
7th & Walnut	T	T	NA	NA	T	NA	NA	T	NA	NA	T	NA	NA	T	NA	NA	NA	NA	NA	NA	NA	
Posy Park	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Marino Vista	PC	PC	NA	NA	PC	NA	NA	PC	NA	NA	PC	NA	NA	PC	NA	NA	NA	NA	NA	NA	NA	
Lion's Field	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>Parklands Impacted but Not Used</b>																						
Orange Memorial	NA	NA	NA	NA	NA	NA	NA	PC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7th Avenue	PC	PC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

NA Not applicable  
 PC Evaluated for potential constructive use, but none identified  
 T Take of land

1) With Downtown San Bruno Station Option only  
 2) With San Bruno tunnel portal contractor laydown Option 3.



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**FIGURE**

## **Francisco Terrace Play Lot**

5-2

Page No.	Response No.	Revised Text
6-10	24.86	<p>Revise paragraph three, sentence one:</p> <p>SFIA can use operating revenues it generates for certain on-airport transportation systems, <u>potentially including portions of the BART extension.</u></p>
6-10	24.90	<p>Revise paragraph three, sentence five:</p> <p>Application to the FAA for approval to impose a PFC would be made by SFIA; <del>up-to-one more than a year could elapse before such revenues begin to flow to the SFIA any PFC revenues could be available for the BART project.</del></p>
6-11	24.87	<p>Add footnote to Table 6-6:</p> <p>1) Airport funds can be used only for eligible on-Airport portions of the BART-San Francisco Airport Extension.</p>
6-12	24.91	Revise the fourth bullet to delete the reference to regional jet fuel tax.
6-13	24.87	<p>Add footnote to Table 6-7:</p> <p>1) Airport funds can be used only for eligible on-Airport portions of the BART-San Francisco Airport Extension.</p>
6-14	24.87	<p>Add footnote to Table 6-8:</p> <p>1) Airport funds can be used only for eligible on-Airport portions of the BART-San Francisco Airport Extension.</p>
7-2	72.358	<p>Revise paragraph one, sentence three:</p> <p>In addition, written comments on the DEIR/SDEIS will be accepted <u>during the public comment period from January 13 to March 14, 1995, and verbal comments can be voiced at the public hearing to be held during this comment period.</u></p>
7-10	19.16	Revise Table 7-2, fourth row, titled "Town of Baden," to include the phrase "loss of park" in all columns except the first and the fourth.
7-10	17.57	Revise Table 7-2, last column, rows seven and eight, to include visual as a significant unmitigable operational impact to the Fifth Addition and San Bruno Park neighborhoods.

Page No.	Response No.	Revised Text
7-14	19.16	Revise paragraph three, last sentence:
		<p>Construction impacts may include disruption of local circulation (all build alternatives), disruption to business (proposed project, I-380 Least-Cost Design Option and Alternative III), <u>and noise/vibration impacts (all build alternatives), and temporary loss of parkland (all build alternatives).</u></p>
7-20	17.94	Revise the text under heading 7.4, Conclusion:
		<p>As discussed in the DEIR/SDEIS and above, the proposed project (1992 LPA), and the I-380 Least-Cost Design Option, and Alternative VI may result in disproportionate impacts on high-minority neighborhoods. None of the other alternatives, including the Aerial Design Option, would create disproportionate impacts on high-minority neighborhoods. The Aerial Design Option appears to be consistent with the mandate of Executive Order No 12898 to avoid disproportionate impacts on high minority neighborhoods. Alternative VI and the Aerial Design Option may disproportionately impact low-income communities. However, with respect to low-income communities, the Executive Order only requires that “[t]o the extent practicable” such impacts shall be “identif[ied] and address[ed], as appropriate....” Although all of the impacts discussed in this section are unmitigable, these impacts have been appropriately addressed by identifying and analyzing a reasonable range of alternatives (see Chapter 2). Within the reasonable range of alternatives, only the No Build Alternative would not impose disproportionate impacts on low-income communities in the study area.</p>
		<p><u>With respect to high-minority and low-income communities, Executive Order No. 12898 requires that “[t]o the extent practicable” such impacts shall be “identif[ied] and address[ed], as appropriate....” All of the impacts discussed in this section are unmitigable and these impacts have been appropriately addressed by identifying and analyzing a reasonable range of alternatives (see Chapter 2).</u></p>
A-1	24.92	Revise Glossary definition of ALRS:
		<p>The transit system, <u>consisting of a dual fixed guideway alignment with trains moving in both directions, would be constructed by SFIA in two phases. In the first phase (1996), SFIA will construct the system from the Ground Transportation Center to parking lots D and DD. In the long-term (by 2006), the system is proposed to be connected to the ferry terminal and the FBO commuter facility on the east side of the Airport proposed to be constructed by the San Francisco International Airport in two phases, connecting the terminals and proposed Ground Transportation Center (GTC) with adjacent and remote parking facilities, nearby transit systems, proposed Ferry Service, and General Aviation Terminals.</u> (Also called a “people mover,” “automated guideway transit,” or “monorail”).</p>
Appendix B	66.178	Revise Table B-36-A, as shown on the following pages.

**Table B-36A**  
**Alternative V-B - Minimum Length Subway to San Bruno**  
**Transit Travel Times (Minutes)(1)**  
**A.M. Peak Period (2010)**

Northbound		Destinations				
Origins		S.F. State	S.F. Civic Center	Union Square	Maritime Plaza	Oakland Center
Hilldale	Travel Time	45	50	51	54	65
CalTrain	Change From No-Build	-29	-9	1	1	-4
Airport Intermodal Station Site	Travel Time	28	33	34	37	48
	Change From No-Build	-19	-12	-5	-5	-9
SFIA Terminals	Travel Time	34	39	40	43	54
	Change From No-Build	-17	-4	-8	-9	-9
So. San Francisco CalTrain	Travel Time	43	46	37	40	55
	Change From No-Build	-12	0	0	0	0
Hickey BART	Travel Time	24	29	30	32	46
	Change From No-Build	-6	-19	-8	-8	-8
Southbound		Destinations				
Origins		Kaiser Medical	Tanforan Shopping	San Bruno City Hall	Hillsdale Shopping	SFIA Terminals
12th Street BART (Oakland)	Travel Time	41	47	58	82	54
	Change From No-Build	-24	-27	-15	-4	-7
Montgomery St. BART	Travel Time	32	34	43	67	39
	Change From No-Build	-18	-25	-15	-6	-5
Civic Center BART	Travel Time	28	30	39	63	35
	Change From No-Build	-18	-25	-15	-8	-2
Daly City BART	Travel Time	13	15	24	48	20
	Change From No-Build	-11	-18	-9	-23	-30
						UAL (SFIA)

Source: Parsons Brinckerhoff, January 1994

(1) Travel times include walk or transit access time to final destination. It does not include origin station access time which varies depending on location of travellers residence. Travel times assume utilization of the fastest transit mode (i.e., bus, BART, or CalTrain). Times shown are unweighted.

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Appendix B	10.12	The comment is correct; there were transcription errors in Table B-40. A revised version is presented on the following pages. The numbers stated in Table B-40, as appeared in the DEIR/Technical Appendix for auto access to the Hickey and Tanforan Stations, were smaller than the correct volumes, while the number for auto access at the Millbrae Avenue Station was greater than the correct volume in all three analysis years. Also, the total number of walk trips under the "productions" columns at the Airport International Terminal Station was omitted in the three analysis years in the original Table B-40.
Appendix C	72.111	Revise Tables C-16 through C-24 to include the intersection of Huntington/Forest as intersection number 43.  Analyses are included in the attached Table in the following pages.
Appendix C	72.113	Revise Intersection 66 in Appendix C tables.  66. Huntington & Sneath San Felipe

**Table B-40**  
**Alternative VI - Millbrae Avenue via Airport International Terminal**  
**BART Station Entries and Exits (1)**  
**Daily Volumes by Access Mode and Trip Purpose**

	1993 (Base Year)		1998 (Year of Opening)		2010 (Horizon Year)	
	Productions	Attractions	Productions	Attractions	Productions	Attractions
<b>Daly City BART Station</b>						
Home-Based Work						
Walk	936	180	985	195	1,029	213
Auto	4,761	—	5,007	—	5,232	—
Transit	2,096	584	2,204	634	2,303	693
TOTAL	7,793	764	8,196	829	8,564	906
Non-Work						
Walk	444	113	467	123	488	134
Auto	980	—	1,031	—	1,077	—
Transit	980	534	1,031	580	1,077	634
TOTAL	2,404	647	2,528	703	2,642	768
Air Passengers						
Walk	13	13	15	15	19	19
Auto	68	68	80	80	99	99
Transit	75	75	87	87	108	108
TOTAL	156	156	183	183	226	226
TOTAL						
Walk	1,394	306	1,467	333	1,536	366
Auto	5,810	68	6,118	80	6,408	99
Transit	3,150	1,193	3,322	1,302	3,488	1,435
TOTAL	10,353	1,567	10,907	1,715	11,432	1,900
<b>Colma BART Station</b>						
Home-Based Work						
Walk	1,084	196	1,140	212	1,191	232
Auto	5,170	—	5,437	—	5,681	—
Transit	5,328	455	5,603	494	5,855	540
TOTAL	11,582	651	12,180	706	12,727	772
Non-Work						
Walk	376	93	395	101	413	110
Auto	748	—	787	—	822	—
Transit	748	441	787	479	822	523
TOTAL	1,872	534	1,969	579	2,057	633
Air Passengers						
Walk	—	—	—	—	—	—
Auto	—	—	—	—	—	—
Transit	6	6	6	6	8	8
TOTAL	6	6	6	6	8	8
TOTAL						
Walk	1,460	288	1,535	313	1,604	342
Auto	5,918	—	6,223	—	6,503	—
Transit	6,082	902	6,396	979	6,685	1,071
TOTAL	13,459	1,190	14,155	1,292	14,792	1,413

Source: MTC, BART-SFO AA/DEIR Patronage Forecasts, May 1991  
MTC, BART-SFO SDEIS/DEIR Patronage Forecasts, October 1993  
Parsons Brinckerhoff, December 1993

(1) "Production and Attraction" format used. Productions are those trips where the station is at the home end of the trip. Attractions are those trips where the station is at the destination end of the trip.

**Table B-40 (cont'd)**  
**Alternative VI - Millbrae Avenue via Airport International Terminal**  
**BART Station Entries and Exits (1)**  
**Daily Volumes by Access Mode and Trip Purpose**

	1993 (Base Year)		1998 (Year of Opening)		2010 (Horizon Year)	
	Productions	Attractions	Productions	Attractions	Productions	Attractions
<b>Airport International Terminal BART Station</b>						
Home-Based Work						
Walk	—	1,517	—	1,646	—	1,799
Auto	—	—	—	—	—	—
Transit	28	2,194	30	2,382	31	2,603
TOTAL	28	3,711	30	4,028	31	4,402
Non-Work						
Walk	—	1,086	—	1,179	—	1,288
Auto	—	—	—	—	—	—
Transit	196	1,572	206	1,706	215	1,865
TOTAL	196	2,658	206	2,885	215	3,153
Air Passengers						
Walk	3,004	3,004	3,527	3,527	4,354	4,354
Auto	—	—	—	—	—	—
Transit	756	756	888	888	1,096	1,096
TOTAL	3,761	3,761	4,415	4,415	5,450	5,450
TOTAL						
Walk	3,004	5,607	3,527	6,351	4,354	7,441
Auto	—	—	—	—	—	—
Transit	980	4,523	1,123	4,976	1,342	5,564
TOTAL	3,984	10,129	4,650	11,327	5,696	13,005

	1993 (Base Year)		1998 (Year of Opening)		2010 (Horizon Year)	
	Productions	Attractions	Productions	Attractions	Productions	Attractions
<b>Millbrae Avenue BART Station</b>						
Home-Based Work						
Walk	44	941	46	1,021	48	1,116
Auto	4,993	—	5,251	—	5,487	—
Transit	10,065	4,212	10,584	4,572	11,060	4,997
TOTAL	15,101	5,153	15,881	5,593	16,595	6,113
Non-Work						
Walk	73	179	77	194	80	212
Auto	1,320	—	1,388	—	1,450	—
Transit	4,176	1,113	4,392	1,208	4,589	1,320
TOTAL	5,568	1,291	5,856	1,402	6,119	1,532
Air Passengers						
Walk	—	—	—	—	—	—
Auto	—	—	—	—	—	—
Transit	1,044	1,044	1,226	1,226	1,513	1,513
TOTAL	1,044	1,044	1,226	1,226	1,513	1,513
TOTAL						
Walk	116	1,120	122	1,215	128	1,328
Auto	6,313	—	6,639	—	6,937	—
Transit	15,285	6,369	16,202	7,006	17,162	7,830
TOTAL	21,714	7,489	22,963	8,221	24,227	9,158

Source: MTC, BART-SFO AA/DEIR Patronage Forecasts, May 1991  
MTC, BART-SFO SDEIS/DEIR Patronage Forecasts, October 1993  
Parsons Brinckerhoff, December 1993

(1) "Production and Attraction" format used. Productions are those trips where the station is at the home end of the trip. Attractions are those trips where the station is at the destination end of the trip.

**Table B-40 (cont'd)**  
**Alternative VI - Millbrae Avenue via Airport International Terminal**  
**BART Station Entries and Exits (1)**  
**Daily Volumes by Access Mode and Trip Purpose**

	1993 (Base Year)		1998 (Year of Opening)		2010 (Horizon Year)	
	Productions	Attractions	Productions	Attractions	Productions	Attractions
<b>Hickey BART Station</b>						
Home-Based Work						
Walk	1,660	126	1,746	137	1,824	150
Auto	2,878	—	3,027	—	3,163	—
Transit	301	489	317	531	331	580
TOTAL	4,839	615	5,089	668	5,318	730
Non-Work						
Walk	527	195	554	211	579	231
Auto	348	—	366	—	382	—
Transit	349	268	367	291	383	318
TOTAL	1,223	463	1,286	502	1,344	549
Air Passengers						
Walk	—	—	—	—	—	—
Auto	—	—	—	—	—	—
Transit	8	8	10	10	12	12
TOTAL	8	8	10	10	12	12
TOTAL						
Walk	2,187	321	2,300	349	2,403	381
Auto	3,226	—	3,393	—	3,545	—
Transit	658	765	693	831	726	910
TOTAL	6,071	1,086	6,385	1,180	6,674	1,291

	1993 (Base Year)		1998 (Year of Opening)		2010 (Horizon Year)	
	Productions	Attractions	Productions	Attractions	Productions	Attractions
<b>Tanforan BART Station</b>						
Home-Based Work						
Walk	72	375	76	407	79	445
Auto	1,980	—	2,082	—	2,176	—
Transit	151	4,348	159	4,720	166	5,158
TOTAL	2,203	4,723	2,317	5,127	2,421	5,603
Non-Work						
Walk	66	385	69	418	72	457
Auto	302	—	318	—	332	—
Transit	302	494	318	536	332	586
TOTAL	670	879	704	954	736	1,043
Air Passengers						
Walk	—	—	—	—	—	—
Auto	—	—	—	—	—	—
Transit	4	4	5	5	6	6
TOTAL	4	4	5	5	6	6
TOTAL						
Walk	137	760	145	825	151	902
Auto	2,282	—	2,400	—	2,508	—
Transit	457	4,846	481	5,261	504	5,750
TOTAL	2,877	5,607	3,026	6,086	3,163	6,652

Source: MTC, BART-SFO AA/DEIR Patronage Forecasts, May 1991  
MTC, BART-SFO SDEIS/DEIR Patronage Forecasts, October 1993  
Parsons Brinckerhoff, December 1993

(1) "Production and Attraction" format used. Productions are those trips where the station is at the home end of the trip. Attractions are those trips where the station is at the destination end of the trip.

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### Intersection Level of Service

#### Huntington Avenue and Forest Lane (Intersection #43)<sup>(1)</sup>

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Year & Time Period	Proposed Project	I No Build	II TSM	III Base	IV E-101	V MLBR INTMD	V-A GTC	V-B San Bruno	VI <sup>(2)</sup> Millbrae Ave.
<b>1993</b>									
A.M.	A	A	A	A	A	A	A	A	A
P.M.	D	C	C	D	D	D	D	D	D
<b>1998</b>									
A.M.	A	A	A	A	A	A	A	A	A
P.M.	D	C	C	D	D	D	D	D	D
<b>2010</b>									
A.M.	A	A	A	A	A	A	A	A	A
P.M.	D	D	D	D	D	D	D	D	D

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Source: Parsons Brinckerhoff, September 1994

- 1) This intersection has all-way stop controlled. The estimation of level of service for all-way stop controlled intersection does not produce a volume-to-capacity ratio and thus the level of service cannot be compared to the No Build Alternative.
- 2) The level of service under the Aerial Design Option LPA are the same as under the Alternative VI LPA.





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